

Positioning Paper: A W3C Workshop on Digital Publishing.

WE ARE ALL DISABLED!

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This is not a technical proposition. This is a very humble web user's testimony from so-called enabled and disabled people: any human being is disabled when it comes to accessing digital information, as it requires a device - that is a computer - to be reasonably understandable, perceivable, operable and robust, unless one wants to print the binary code of a movie, such as *La Jetée* by Chris Marker as the artist David Guez recently did for his art exhibition at Centre Pompidou¹. Such work also reminds us that all digital information is the same: a sequence of bits. The main example in this abstract is the edition of "paper" books, and especially textual content; such example could be then expanded to other kinds of publishing (video, music, software and so on) even if the terms "editor" or "publish" are less used in such case. In the example of books, what makes Web contents more accessible to the so-called enabled people is that information system are often some kind of sophisticated "paper browser"² : the steps involved in the consultation of an information system through such a browser somehow reproduce the ones involved in the consultation of several different paper editions in a library, except that the search is quicker and more powerful: one click of the mouse opens a related map or dictionary entry. If disable people were able to access a paper information system without help, they will be able to access any "paper browser" in a digital information system. A paper information system has also to be understandable, perceivable and robust. However, it can hardly be multimedia, interactive and operable as a digital information system can be.

If one cannot have access to the language used to represent an information - whatever is that language and whatever is the reason of this lack of accessibility (perception, motor, cultural, social, technical, cognitive difficulties), this person cannot have any access to such information nor the capacity of producing it. Accessibility is everywhere from multilinguism to more obvious disabilities, from citation of a scientific content to what a published book cannot represent.

Through the example of texts, this proposition aims to insists that Digital publishing has to be based on interoperability through multimedia and highly structured information. A text-to-speech

¹ See: Disque dur papier : La Jetée de Chris Marker http://www.centrepompidou.fr/cpv/ressource.action?param.id=FR_R-5f64ee7f446ef75092c89ff3f7df9ead¶m.idSource=FR_DO-c1f7b8b9de27174d32f9d30ae376dae

² «La source, son historien et l'édition numérique : le paradoxe du navigateur à papier ?» by Marion Lamé <http://www.univ-tlse2.fr/accueil-utm/infos/pratique/agenda/seminaire-transversal-international-l-histoire-numerique-digital-history-239893.kjsp>

software is as useful as for able and disable people. For instance and for now, a long scientific article might be more pleasant to listen - as if it was a kind of radio broadcast - than it is to read on a screen. could text-to-speech software improve their reading thanks to a digital representation of text's syntax (treebanking)? Could an author take 10 minutes to register his or her own text? Could a crowdsourcing propose some audio form of texts as it already exists for audiobook?

Digital publishing has to deal with complex textual resources which can handle (e)books from different traditions and multiple copies of the same text conveying during different years and different hands.

Digital text authoring within a new Open Web Platform perspective is collaborative and reusable. Therefore a flexible set of tools and libraries are demanded and a standard global effort is sought which deals with the joint editorial activities performed by textual scholars.

The versioning theme is a challenge not also because the platform is collaborative but also because the text is a fluid object and relations could be invalidate. So There is the need to maintain a consistent dependencies tree among data.

Publishing domain could have advanced search requirements in addition to the single word match. It could be essential edit retrieve and process multiple concurrent annotations, construct lexical and multilingual indexes and consequently support advanced linguistic-base search. In order to handle these features current technologies and standards (EPUB) seem to be decisive. An overview to other experiences like CTS/CITE architecture or TEI guidelines should be contemplated.

It could be considered steps devoted to process data in order to enrich the resources with information they did not have before. This particular task has been accomplished by Natural Language Processing in specific and Artificial Intelligence in general.

The Open Web Platform viewpoint as a global purpose has to deal with the alignment of different translations on the same text in order to give

It is not a question of enabled people giving gently access to less lucky people.

Enabled and disabled human beings are sharing the same goal in front of a digital information network, that is a global access to digital information (multimedia, interactive, operable...) thanks to the genuineness digital information system that is not a paper browser.