

User eXperience and Translatability Viewed through the Lens of a Triple Constraint: Time, Cost and Quality

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Abstract: User eXperience (UX) guidelines make web content engaging, while controlled language guidelines make it easily translatable. As organizations seek to serve diverse linguistic populations, the question of whether UX and translatability are compatible or in conflict becomes increasingly relevant, particularly when it comes to balancing time, cost and quality. This paper reports on a multilingual recipient evaluation of web content.

UX – or “user experience” – is an important consideration in website design. UX is concerned with the user-centred design of a website: it focuses on the total subjective experience of the user (e.g. positive, negative, so-so) and on whether the site meets the user’s needs. UX can be considered the sum of a person’s interactions with a product, including an assessment of the product’s functionality, as well as their reaction to using it. Commonly asked questions that relate to UX and websites include whether the site is easy to use, attractive and appropriate.

Because the web is a multimedia platform, UX often focuses on visual aspects of the site (e.g. font, icons, colours, navigation). Yet, much web content is still text-based, and there has been some effort to consider text as part UX. For example, some organizations produce style guides for content creators which suggest the particular tone and voice that should be adopted to appeal to site users. However, to the best of our knowledge, a question not yet asked is: *Are UX and translatability compatible?*

Many organizations—including libraries—want to make more information available in a greater number of languages, for example, in order to better meet the diverse linguistic needs of immigrant communities (Holt, 2009). However, the cost of professional translation is prohibitive. In addition, the time required for professional translation is considerable. This is of particular concern when dealing with website translation because the content is dynamic and is updated regularly. It therefore becomes essential to consider the parameter of time, alongside the parameters of cost and quality, in order to determine the best return on investment when resources are limited.

One way in which organizations are trying to make the translation process more time- and cost-efficient is by turning to technologies, such as machine translation (MT) systems, for support (e.g. Cheng, 2000; Thibodeau, 2000). Moreover, given that many search engines (e.g. Google) now incorporate MT, users themselves can translate any website that they visit into another language. Indeed, IFLA’s 2013 [Trend Report](#)—which “identifies five high level trends in the global information environment, setting out existing and likely future trends which characterise the new digital paradigm in libraries”—flags machine translation as a technology to watch. IFLA’s report raises some interesting questions, such as “Machine translation will change the way we communicate, but will it increase our understanding?” and “What is the cultural impact of using machine translations without the benefit of cultural context?”

Machine translation clearly takes less time than human translation, and it is also less expensive. Although the quality of machine translation systems has improved considerably in recent years, there nonetheless remain concerns about the accuracy and acceptability of unedited machine translation output. The notion of “pre-editing” the input to a machine translation system in order to simplify vocabulary and structures which can in turn reduce ambiguities and thus improve the quality of the machine translated output has been explored with considerable success (e.g. Lockwood, 2000; Nyberg et al., 2003). Moreover, as pointed out by Brown (2003), the savings in time and cost are multiplied in situations where a single input text is destined to be translated into multiple target languages, which may well be the case of a library seeking to provide translations for a diverse range of immigrant populations. However, there is some evidence to support the notion that a text that has been pre-edited may be less appealing to readers (e.g. Hayes, 1996; Reuther, 2003).

In web content development, a recent trend has emerged in which the developers attempt to gauge the User eXperience (UX) (e.g. Hassenzahl and Tractinsky, 2006; Garrett, 2011). As noted above, this has largely focused on visual elements, such as fonts, graphics, layout, etc. However, some developers are also beginning to consider the effect of the text on UX (e.g. Gillis, 2010; Halvorson, 2011; Sandusky, 2011).

A number of guidelines have been proposed from within the translation community for creating texts that are easily (machine) translatable (e.g. Elbes, 2013; Microsoft, 2012). Meanwhile, different guidelines have been suggested from within the web development community for creating texts that positively affect UX (e.g. Baldwin, 2010; Malamed, 2010). In summary, MT-related controlled language writing guidelines focus on textual precision, while UX writing guidelines focus on making a text engaging. The main tension is between being *catchy* (UX) and being *precise* (MT). The question is whether these two different sets of guidelines (controlled language for MT vs UX) are compatible or in conflict. Moreover, in the case of a conflict, which would readers prefer?

In this pilot study, we apply and test the two sets of guidelines by conducting a recipient evaluation (Trujillo, 1999). Part of this evaluation includes a survey, the design of which is informed by Law et al. (2009). The general research questions addressed by this study include: 1) Do source language readers prefer web content written according to UX guidelines or MT guidelines? 2) Does pre-editing a text using MT guidelines improve translation quality?, and 3) Do target language readers prefer translated web content generated from texts that have been pre-edited?

To answer these questions, we began with an English-language website intended to reach both a domestic (Canadian) and an international audience. The text was then revised following UX guidelines (Text 1). A second version of the same content was then pre-edited according to machine translation controlled language guidelines (Text2).

Using FluidSurveys, we developed a recipient evaluation, which included an anonymous survey to gather general profile information about Canadian English-speaking respondents and an evaluation to determine the extent to which the participants were satisfied with each of the two versions of the text (i.e. the UX version and the controlled language version). One-hundred and eight respondents completed the survey.

In the next phase, both versions of the English-language text (Text1 and Text2) were translated into Spanish using Google Translate. A second recipient evaluation was developed to gather general profile information about Colombian Spanish-speaking respondents and to determine the extent to which those respondents were satisfied with the two translated versions. One-hundred and seventy-eight respondents completed the survey.

Finally, three professional English-to-Spanish translators were also consulted to provide feedback on the translation quality.

The results of the two recipient evaluations and the translators' feedback were analyzed to determine the nature of the relationship between translatability and UX. Findings suggest that, not surprisingly, the translated versions of Text 2 (produced using controlled language MT guidelines), were of a higher quality and more appealing to Spanish readers (62%). However, more surprising are the findings that a considerable number of English readers (39%) also preferred the pre-edited controlled language texts rather than the versions produced according to UX guidelines. This may point to the need for some adjustments to be made to the UX style guidelines that are provided to web content developers. The reasons given by the two groups of respondents for their preferences, as well as other findings, will be discussed in more detail and will be related back to the triple constraint presented by the parameters of time, cost and quality.

NOTE: An extended version of this paper, which incorporates feedback received at the CAIS conference, was subsequently published as Bowker (2015).

References

Baldwin, S. (2010, October 27). Plain Language Tenets in UX. Retrieved, October 10, 2013, from <http://uxmag.com/articles/plain-language-tenets-in-ux>

Bowker, L. (2015). Translatability and User eXperience: Compatible or in Conflict? *Localisation Focus – The International Journal of Localisation* 14(2): 13-27.

Brown, M. K. (2003). Trends in Writing for Translation. *Multilingual Computing and Technology*, 14 (7), Special Supplement #59 on Writing for Translation, 4–8.

Cheng, S. (2000). Globalizing an e-Commerce Web Site. In: R. C. Sprung, ed. *Translating Into Success: Cutting-edge strategies for going multilingual in a global age*. Vol. XI 2000 Amsterdam/Philadelphia: John Benjamins, 29–42.

Elbes, Y. (2013, February 17). Towards Machine translation-friendly sites. Elbes Multilingual Communication. Retrieved March 9 2013, from <http://elbes.com/machine-translation/towards-machine-translation-friendly-sites>.

Garrett, Jesse James. (2011). *The Elements of User Experience* (2nd ed.) Berkeley: New Riders.

Gillis, D. (2010, June 23). Fusing Content Strategy with Design. Retrieved, October 10, 2013, from <http://uxmag.com/articles/fusing-content-strategy-with-design>

Halvorson, K. (2009, February 15). Content Strategy and UX: A Modern Love Story. Retrieved, October 10, 2013, from <http://uxmag.com/articles/content-strategy-and-ux-a-modern-love-story>

Hassenzahl, M. & Tractinsky, N. (2006). User Experience – a Research Agenda.. *Behaviour and Information Technology* 25(2): 91-97

Hayes, P., Maxwell, S., and Schmandt, L. (1996). Controlled English Advantages for Translated and Original English Documents In: *CLAW 96, Proceedings of the First International Workshop on Controlled Language Applications*, KU Leuven, Belgium, 1996. pp. 84–92.

Holt, G. (ed) (2009). Library Services for Immigrants, an Abridged Version. *Public Library Quarterly* 28(2): 120-126.

IFLA (2013). Riding the Waves or Caught in the Tide? Navigating the Evolving Information Environment. Insights from the IFLA Trend Report. The Hague: IFLA. Retrieved on December 20, 2013 from http://trends.ifla.org/files/trends/assets/insights-from-the-ifla-trend-report_v3.pdf

Law, E.L.C., Roto, V., Hassenzahl, M., Vermeeren, A.P.O.S. and Kort, J. (2009). Understanding, Scoping and Defining User eXperience: A Survey Approach. In the *Proceedings of the SIGCHI conference on Human Factors in Computing Systems*, pp. 719-728.

Lockwood, R. (2000). Machine Translation and Controlled Authoring at Caterpillar. In: R. C. Sprung and S. Jaroniec, eds. *Translating Into Success: Cutting-edge strategies for going multilingual in a global age*. Vol. XI 2000 Amsterdam/Philadelphia: John Benjamins, pp. 187–202.

Malamed, C. (2010, May 17). The Small Print: Writing UI Instructions. Retrieved, October 10, 2013, from <http://uxmag.com/articles/the-small-print-writing-ui-instructions>

Microsoft. (2012). *Microsoft Manual of Style, Fourth Edition*. Seattle, WA: Microsoft Press. Retrieved March 9 2013, from http://blogs.msdn.com/b/microsoft_press/archive/2012/01/26/new-book-microsoft-manual-of-style-fourth-edition.aspx.

Nyberg, E., Mitamura, T., and Huijsen, W.-O. (2003). Controlled language for authoring and translation. In: H. Somers, ed. *Computers and Translation: A translator's guide*. Amsterdam/Philadelphia: John Benjamins.

Reuther, U. (2003). Two in One – Can it work? Readability and Translatability by means of Controlled Language. In: *Controlled Language Translation. Proceedings of the Joint Conference combining the 8th International Workshop of the European Association for Machine Translation and the 4th Controlled Language Applications Workshop*, Dublin City University, Ireland, 15–17 May, 2003.

Sandusky, B. (2011, April 26). The UX of this Article. Retrieved, October 12, 2013, from <http://uxmag.com/articles/the-ux-of-this-article>

Thibodeau, R. P. (2000). Making a Global Product at MapInfo Corporation. In: R. C. Sprung, ed. *Translating Into Success: Cutting-edge strategies for going multilingual in a global age*. Vol. XI 2000 Amsterdam/Philadelphia: John Benjamins, 127–146.

Trujillo, A. (1999). *Translation Engines: Techniques for Machine Translation*. London: Springer-Verlag.