# Heftings: A Preliminary System to Support Impossible Translation

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## Abstract

The Heftings project is an experiment in alternative ways of approaching particularly difficult to translate literature, with the idea that different *attempts* at translation can be provocative and interesting, even if they do not result in a complete, successful translation as conventionally understood. The aim of this report is to describe the concept behind Heftings and the process of building the first particular Heftings platform, a site for collaborative translation, in 2016. Focusing on that system, this report details specific quirks and customizations and how this version of the Heftings system has been used.

A technical report from

The Trope Tank NYC, 545 E 14th St & MIT, 14N-233 http://nickm.com/trope\_tank/ © 2017 Chris Kerich This work is licensed under the Creative Commons Attribution-ShareAlike 4.0 International License. To view a copy of this license, visit: http://creativecommons.org/licenses/by-sa/4.0/ or send a letter to Creative Commons, 444 Castro Street, Suite 900, Mountain View, California, 94041, USA. Heftings began in 2016 as a project adjacent to Renderings. The goal of the Renderings project is the translation to English of computational work originally in languages other than to English, for instance, the translation of a working Polish text generator, a computer program, to a computer program that functions as an English text generator. The goal of Heftings is different, in that the project seeks to facilitate translation (or at least attempts at translation) from any language to any language. In addition, Heftings is concerned with exceedingly difficult to translate work, including literary works bound by formal constraints, such as palindromes, but also including visual poetry, highly allusive writing, and other sorts of texts. Heftings, unlike traditional translation projects, aims to collect many different "translation attempts" that experiment with different emphases or styles of translation, and valuing different aspects of a work. These attempts may paint a clearer picture of the source work than any single canonical translation. The idea is not new; one of the more interesting books that take a similar approach is Douglas Hofsteader's *Le Ton beau de Marot* (1997).

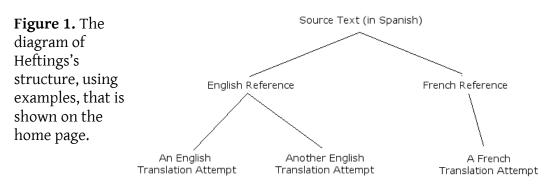
#### **Building Heftings**

The first main decision was the technological basis for Heftings. We decided to use a wiki platform, specifically Dokuwiki. This was because of the participatory ease of a wiki and the availability of useful plugins, and also because, in the future, it seemed like it would be relatively easy to allow the user interface language to be swapped between many languages – something very important for a multilingual translation platform. The current version of Heftings uses 33 PHP plugins, and many of them are heavily modified to suit the needs of the specific project. It is structured in a four-level tree structure: the root, the source text page, a language-specific reference page, and translation attempts (Figure 1). As each is discussed, explanations will be provided of the difficulties in creating them and of what modifications or plugins were necessary for this implementation.

## The Structure of Heftings

The first page displayed when logging into Heftings, which has only been available as a private site, is the root page. The only items on the page are a link to create a source text node, a filterable list of all the source texts, and a diagram of the structure of the platform as it had been determined by Montfort, myself, and other Trope Tank researchers. The diagram was included because the structure of Heftings has been hard to grasp for new users, even a limited group that has discussed the project before joining. Although it is the content pages are all only on essentially three levels (strictly

speaking, the entire three is four-level, including the root), it is an unusual structure for a wiki of any sort and for any sort of translation project.



The list of all source texts can be filtered by language, which in turn is based on a language tagging system applied across Heftings. Each page has a tag that explains what kind of page it is: source text, reference, or translation attempt. Pages have an additional tag or tags which indicate their language or languages (for multilingual works). The tagging plugin is unmodified, but the filterable list plugin has been changed to display its information in a clearer way, to remove some unused UI elements for the purposes of Heftings, and to support a wider array of characters than before.

Clicking the "add a source text" link will take the user to an HTML form through which they can add a source text, using an HTML forms plugin. This plugin references another template plugin which uses the contents of the HTML form to create a new page based on a template. In Heftings, unlike in some other wikis, users are not meant to create new pages by hand but instead to use these forms to create pages of particular types. The HTML form takes the source text and source language but, notably, does not reserve a field for a title. Instead, the plugin has once again been modified to create the page title itself based on the first line of text, replacing Dokuwiki's reserved characters with underscores. The plugin has also been modified to change the browser's page to the created page after the "create" button is pressed.

Language	Clear filter		
•			
691 edna d niluom ua	2016/04/11 13:49	Chris Kerich	
atto saa taas ottaa	2016/03/29 10:33	Veli-Matti Karhulahti	
eiti en iske seksineitiae	2016/04/07 12:10	Veli-Matti Karhulahti	
lppiruusu	2016/04/18 16:06	Veli-Matti Karhulaht	
oom 1	2016/04/06 19:05	Chris Kerich	
boom 2	2016/04/07 11:56	Michał Zmuda	
oom 3	2016/04/09 11:22	Michał Zmuda	
va	2016/04/18 16:23	Veli-Matti Karhulahti	
avenovi pivo nelej	2016/03/18 13:08	Nick Montfort	

Browse existing works using this filter or add a source text:

Welcome to Heftings!

**Figure 2.** A partial listing of source texts, shown on the home page after login.

On a source text page, there is a link to go back to the root page, the text entered in the HTML form, tags indicating the language and type of page, a hidden form to create a reference page, and a list of the current reference pages. A reference page is a page containing information pertinent to translating the work into whatever desired language. For example, a source text of a Spanish palindrome may have an English reference page which, to begin with, simply states that the work is a palindrome; it may also include a gloss that attempts to express the literal meaning of the text in English.

The source text of the work that appears on this page is wrapped in poem> tags, which is another plugin which mainly makes linebreaks work as you would expect them to in a poem. The form for creating a new reference page is hidden by an additional "hiding" plugin so it does not take up too much of the page. Once clicked and expanded, it works the exact same way as the source text HTML form except the name is instead decided by the name of the source text page prefixed by a two letter abbreviation of the reference page's language. The HTML form plugin has been modified to not allow there to be two pages with the same name, thus disallowing multiple reference pages in the same language. Source text pages are also the first to allow comments, which are enabled via a plugin. These are intended to allow high-level iscussion of the translations and references, and are disabled on pages where there are not specific translation issues to comment on (the root page, the "add a source text" page).

**Figure 3.** A specific source text, this one a visual poem, and word square, in German. Discussion is enabled, although nothing has been added here.

Up to Sta	ırt				
sau					
aus					
usa					
Hansjörg	Maver				
, ,	,				
				🗞 German	, Source
	farran Dama	я			
add a Re	eference Page	2			
en sau	2016/03/17 23:31	Nick Montfort	english, reference		
es sau	2016/03/17 23:35	Nick Montfort	spanish, reference		
Discu	ussion				

B  $I \ \underline{U} \ \mathrm{TT} \ \underline{S} \ \underline{\Pi} \ \underline{\Pi} \ \underline{\Pi} \ \underline{\Pi} \ \underline{H} \ \underline{H} \ \underline{\Theta} \ \underline{\Xi} \ \underline{\Xi} \ \underline{\equiv} \ \underline{\bigcirc} \ \underline{\Omega} \ \underline{\textcircled{}} \ \underline{\Diamond} \ \underline{\textcircled{}} \ \underline{\underline{B}} \ \underline{B} \ \underline{\underline{B}} \ \underline{\underline{B}} \ \underline{B}} \ \underline{\underline{B}} \ \underline{B} \ \underline{\underline{B}} \ \underline{B} \ \underline{\underline{B}} \ \underline{B} \ \underline{B} \ \underline{B}} \ \underline{B} \ \underline{B} \ \underline{B} \ \underline{B} \ \underline{B} \ \underline{B} \ \underline{B}} \ \underline{B} \ \underline{B}$ 

Enter your comment. Wiki syntax is allowed:

The reference page is similar to the source text page, but it includes an HTML form to add a translation attempt and also features the current list of the current translation attempts. Adding a new translation attempt through the HTML form creates a title in the same way that the new source text title generation works, based on the first line of the text. On a created translation attempt page, there exists one more HTML form- to fork that translation attempt. This is added as a convenience, so that if one Hefter (our informal term for a user of the Heftings platform) is inspired by a translation attempt, they can create their own while keeping open the page of their inspiration. This new translation attempt will be attached to the reference page for that language.

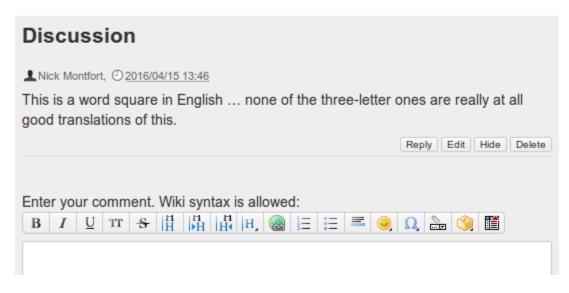
Up to Source pig (sow) from USA				<b>Figure 4.</b> The English reference
Attempt *		ıpt	© English, Referer	page, with a short gloss. It could have also included other relevant high-leve notes, for instance, that this is a word
Create = asp = cow = piglets = sin = swine = usa	2016/03/17 23:32 2016/03/17 23:32 2016/05/12 11:09 2016/11/20 13:26	Nick Montfort Veli-Matti Karhulahti Milton Läufer Veli-Matti Karhulahti		square. Six trans- lation attempts have been made. Again dis- cussion is enabled
Discussio	n			enabled.

Enter your comment. Wiki syntax is allowed:  $\mathbf{B} \quad I \quad \underline{\mathbf{U}} \quad \mathbf{TT} \quad \mathbf{S} \quad \begin{array}{c} \underline{\mathbf{H}} \\ \underline{\mathbf$ 

## Up to English Root

asp spa pas

S English, Attempt



**Figure 5.** A specific English attempt. The translator (Montfort) computed all threeletter English word squares (based on a particular lexicon) and simply selected the "best" one, which, as indicated in a discussion comment, does make for a very good translation.

#### Conclusions

As of writing, the current instantiation of Heftings has only twelve users, and work has tended to happen in bursts. The sometimes unwieldy nature of the platform sometimes necessitates guidance to facilitate even the smallest bit of work. Shorter works have tended to receive the most attention and have a greater diversity of translation attempts. Larger works have been attempted but require work to be done in smaller chunks and have generally been structured as diversified work on a single translation as opposed to a multiplicity of translations. In some cases (as with the "Boom" poems in Polish) the work done on the Heftings platform has contributed to a published translation. In other cases, work has revealed something about the plausibility of translating certain types of texts, such as short palindromes, across languages. While it is not known whether the project will remain in and be further developed using its current Dokuwiki incarnation, this version of Heftings serves as a prototype that can inform future incarnations.