# CHICAGO HITTITE AND ELECTRONIC HITTITE DICTIONARY (CHD AND eCHD)

# Theo van den Hout

Work on the words starting in  $\S u$ - for what is going to be the last installment of the letter  $\S$  is well underway. Theo van den Hout and Harry Hoffner have finished work on all  $\S i$ -words and the final batch was sent off to our outside consultants Gary Beckman (Ann Arbor), Craig Melchert (Los Angeles), and Gernot Wilhelm (Würzburg, Germany). We have already received back some of their comments that can then be incorporated into the final version. With the help of our junior editors Petra Goedegebuure, Richard Beal, and Oğuz Soysal, we should finish work on the  $\S$  in the coming year.

Among the *šu*-words there are as usual some important ones like, for instance, *šuppi*- and its many derivatives. *Šuppi*- is one of two Hittite words for "clean, pure." The other, *parkui*-, denotes that something is free of impurities: it can be used to describe gold and silver, undiluted drinks ("straight up"), a tablet can be called *parkui*- if it is "fair copy" of a text without major mistakes, clothes can be "clean," or somebody "innocent." But someone or something that is *parkui*- may not necessarily be fit to be in the presence of gods: that is the special range of *šuppi*-. *Šuppi*-has that higher degree of ritual purity that makes someone or something fit for a god and it can sometimes be rendered as "holy" or "sacred." According to his name the famous Hittite king Šuppiluliuma was so called after a town named "Holy Springs." As one can imagine, the Hittite texts with their emphasis on cult and ritual have a lot of *šuppi*- in them!

Kathleen Mineck and Oya Topcuoğlu continued to maintain the CHD word files. They are currently busy working on filing the *Keilschrifttexte aus Boghazköi* volumes 44, 45, and 50. A

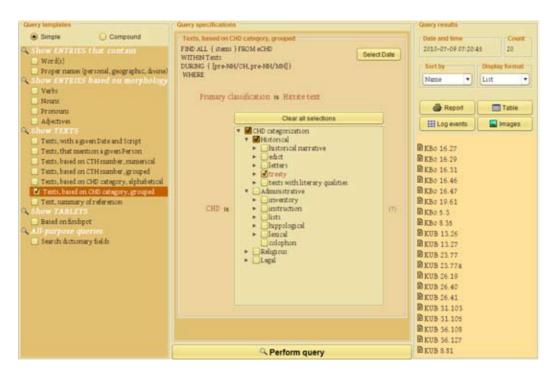


Figure 1. Query facility; find all treaty texts dated to the pre-Neo Hittite period

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second project is the final cataloging and integration of old hand-written cards from the early excavations, many of which have already been used, when published, by the dictionary staff. Oya has done, moreover, a tremendous job in digitalizing a comprehensive Hittitological bibliography that Oğuz Soysal compiled over the years hand-written on cards. It contains many very rare items and will eventually be linked to our electronic dictionary project, the *e*CHD.

The eCHD is the realm of our programmers Sandra Schloen, Dennis Campbell, and student Seunghee Yie. Over the past year, the eCHD has seen several improvements, some in style, others in substance. The new style of the eCHD query facility provides a list of query templates, shown in the left pane (fig. 1). The query specification panel (center pane) allows the viewer to select various criteria to limit the search. The results of the query are shown in the rightmost pane. On the electronic front, the eCHD has seen several improvements, some in style, others in substance. The new style of the eCHD query facility provides a list of query templates, shown in the left pane in figure 1 below. The query specification panel (center pane) allows the viewer to select various criteria to limit the search. The results of the query are shown in the rightmost pane.

Dictionary articles can be searched for words based on string matches or based on morphological qualities. Texts can be selected based on dating, content or categorization. In the example above, only the texts that are designated as treaties are to be considered. Contextual scoping allows the viewer to restrict the range of the query; for example, to include only those texts from tablets found at Emar, or only those texts from Old Hittite and Middle Hittite periods.

The query facility is under ongoing development to make it more stable, substantial, and useful over time. New query templates and options for selection and scoping are added on a regular basis.

One of the challenges associated with the query system is the problem of finding words within the dictionary articles that are marked as being damaged, uncertain, omitted, erased, etc. That is, a string match for "peran" (or "pé-ra-an") is likely to miss "p]é-ra-an," "pé-]ra-an," "pé-ra-[an," "pé<-ra>-an," and other variations. To address this issue, each citation within the dictionary is being linked to a primary version of the cited text which extracts the indicators for damage, uncertainty, and the like, and which represents these conditions as metadata instead. The metadata is

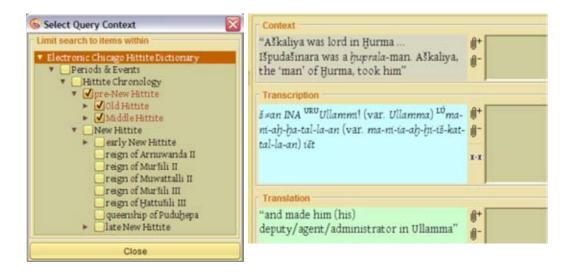
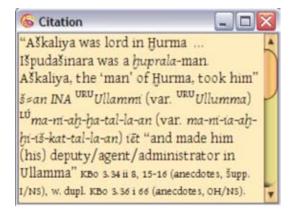
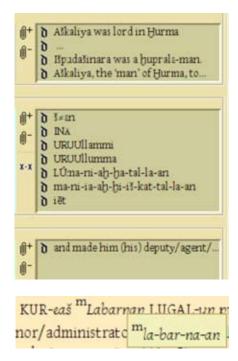


Figure 2. Screenshots of the eCHD search feature

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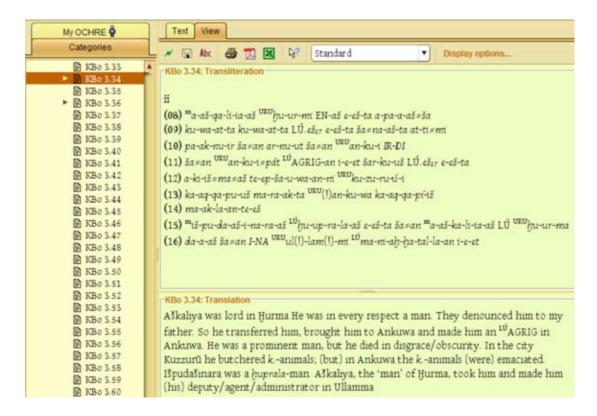


Figure 3. Screenshots of the eCHD

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applied to the text when it is presented for display thus preserving the overall "look" of the text. This strategy allows the query mechanism to find string matches successfully while retaining the individual formatting characteristics of each specific reference.

To illustrate this approach, consider the following current form of the first citation of the article LÚ *maniyaḥḥatalla*. Each of the sections of the citation — the **Context, Transcription, and Translation** — were previously entered as explicitly formatted text.

Using the new strategy, each section of the citation is linked to the appropriate phrases of the text instead. The links may reference the translation of the text, or either of its word-by-word or sign-by-sign formats.

In both cases, the display of the Citation is the same.

A side benefit of linking to a pure form of the text is that access to the underlying structure of the text makes possible the display of sign-by-sign readings of each cited word as the cursor rolls over the displayed text.

While much of the textual content is referenced piecemeal in citations, the development of the master catalog of texts, in linkable units of both transliteration and translation, will greatly increase the substance and utility of the *e*CHD.

All of the textual content as well as the dictionary articles can now also be exported to PDF. This new feature, combined with the existing import utility, data entry interface, and display formats, completes the process from data entry to display and printing, paving the way for online composition and publication of new dictionary articles in the future.

As usual, we had several visitors. Craig Melchert (UCLA) came to our campus and gave a lecture that was sponsored among others by our Department of Near Eastern Languages and Civilizations. Anatolian archaeologist Ann Gunter (Northwestern University) delivered a lecture on the frontiers of the Hittite empire and paid the CHD a visit while here. Gary Beckman (University of Michigan), his student Ilgi Evrim, Ada Taggar-Cohen (Doshisha University, Kyoto, Japan), and again Willemijn Waal, now "Dr. Waal," consulted our files for their work.