# Report on the Digital Tripitaka Koreana 2001

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## 1. Introduction

Since releasing TK 2000, many users reported the difficulty in its installation.   In addition, there have been so many users to complain the unfriendly designed search functions.   In order to meet these complaints, the staffs of RITK should make a plan for improving TK 2000 immediately after it was released.

These problems are caused first by spending more time to improve the accuracy of text data than what we expected.   Secondly, it prevents us from taking as much time as we like in articulating the installation and search programs. Thirdly, the crucial mistake we made in programming TK 2000 comes from sticking to the DHTML method of programming.   We see only the advantage of the program to easily manage the Unicode characters.   However, it brought about the inefficiency to manage some data or link data, and finally resulted the defect of TK 2000, the difficulty of installation, poorly working search functions.

In order to solve these problems, we changed the strategy to display the data.   The most urgent matter in programming the digital Tripitaka Koreana 2001(TK 2001) as an upgrade version of the TK 2000 was to replace the improperly working parts based on DHTML with a more simply designed program.   We utilized Visual Basic program to create new data and used web browser to display Unicode characters.   And then we linked these with rest of data programmed by DHTML.   This process of work was successfully done.   As a result, TK 2001 is now able to provide the functions that were planned to put in TK 2000 but not actualized, such as automatic linkage of Unicode data and the image data of Tripitaka Koreana, a digital dictionary of classical Chinese, and the short digital dictionary of Buddhist terms.   Although it is a type of test version (working with Windows 2000), TK 2001 will provide an English version for the convenience of English language users.

## 2. Some Noticeable Changes of TK 2001

### A. Simplified Design of Front Page

We made it simpler than the previous one in order to retrieve the front page fast and quick
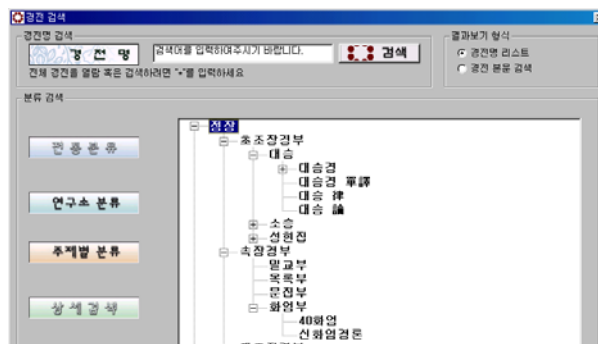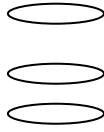
access of search page.
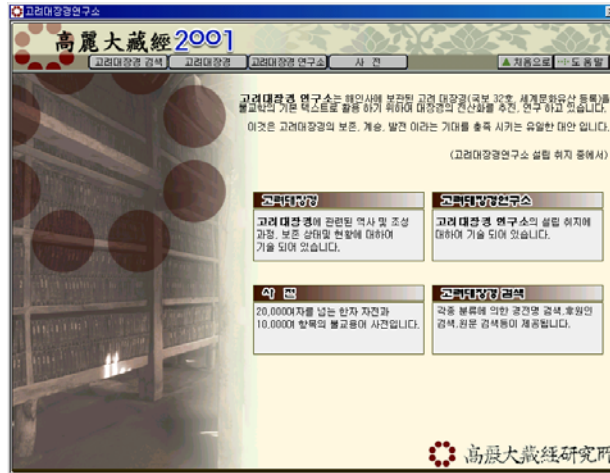


1. Front Page of TK 2001



2.First Page of Search Sutras

B. Three Types of Search Methods based on Tree Form of Classification TK 2001 provides 4 kinds of search function. The first three are based on the classifications by the traditional, the RITK's, and subjects.
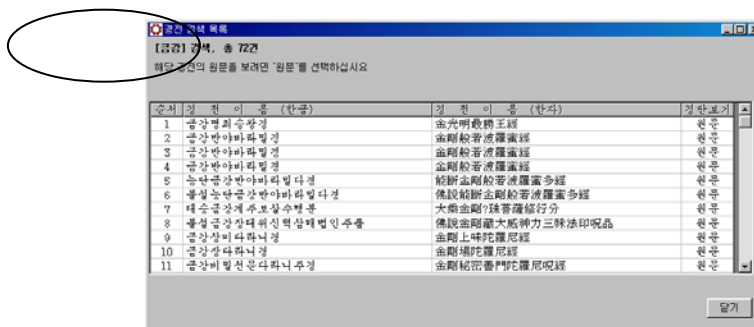
3.Three kinds of Search Functions

Since those are user friendly designed by using tree form of structure, it might be utilized without the manual.

One of the noticeable changes in TK2001 is to provide the statistics of the search result with the quick retrieving of its data as follows.
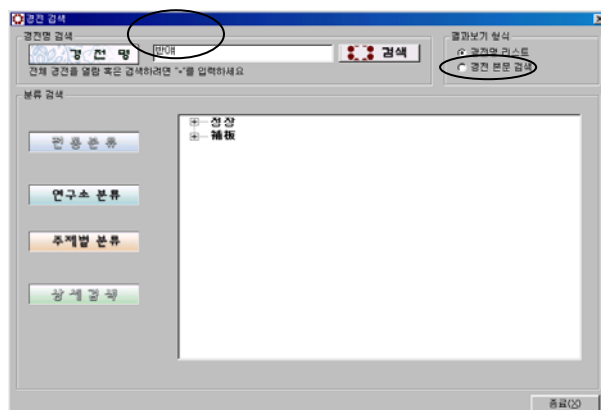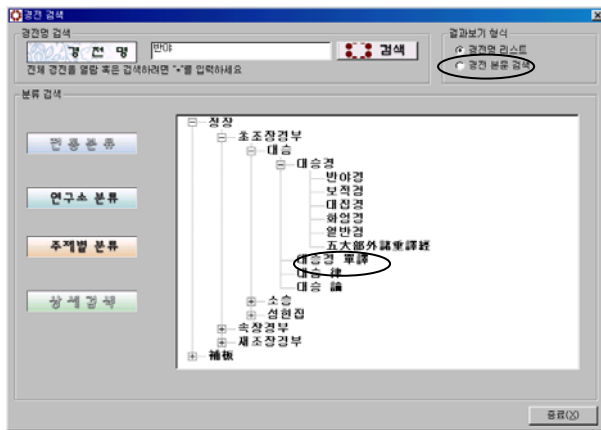


4. Result Screen

C. Two ways of Searching Sutras
ii.  To Find Sutras by Titles

It has a search function to find sutras simply by imputing full or part of title of a sutra or clicking one of icons seen in the tree form of classifications.
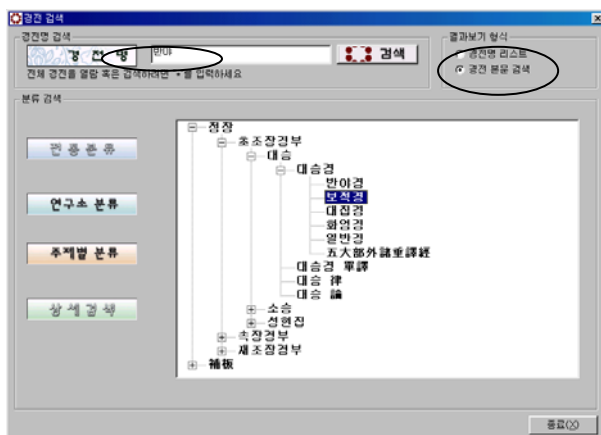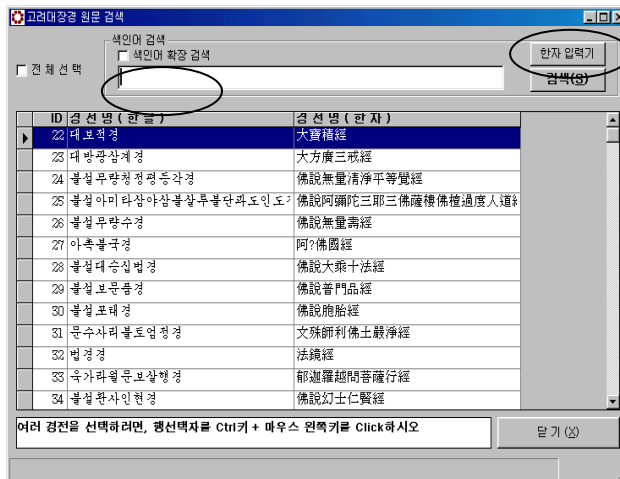
5. By Inputting the Title of a Sutra



6. By Clicking the icon circled

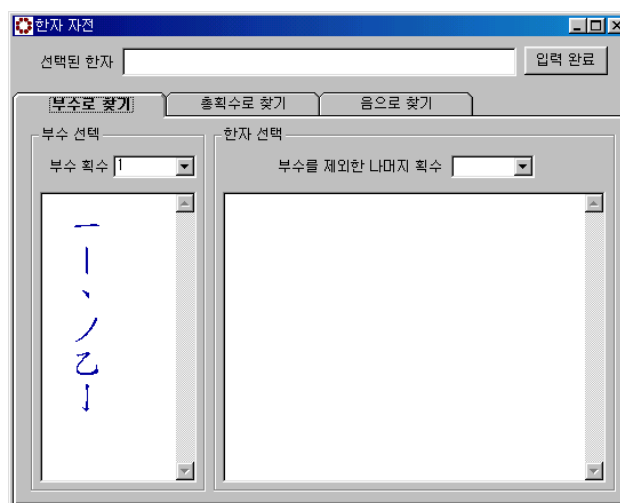iii.  To Examine the Contents of A Certain Sutra or Sutras

It provides the tool to search a Buddhist term in the selected sutra or sutras by inputting a Korean word in the query box or using the Chinese word input tool.

7. Click the icon for searching the contents



8. Search by inputting a word



9. Search by using the tool for 3 ways of inputting a Chinese Character

10. To Search the word  般若  in the selected sutra



11. The Window shows the statistics of the search results: "299 frequencies of the word  般若  are found." "it

takes 0.02 seconds to search."

12. Window of Index for the word to be searched



13. Result Screen

D.  Detailed Search by Categorical Conditions

   This search method is designed according to the data created by Professor Seung-sok Chong, the author of the explanatory bibliography of Tripitaka Koreana. Its feature is as follows:
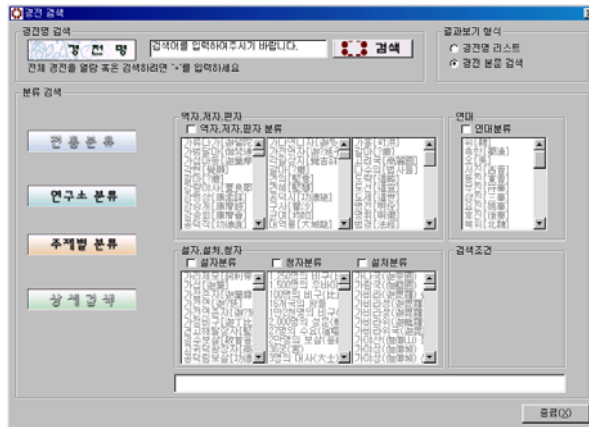
14. The Window for Detailed Search by random selection of the given conditions

E. Dictionaries of Classical Chinese and Buddhist Terms
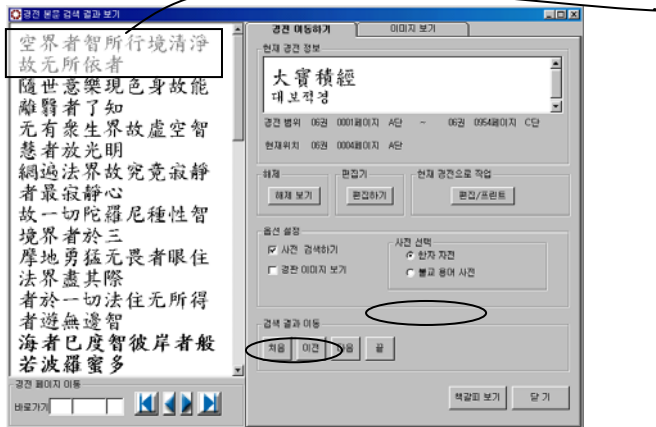


15. Automatic Search of Chinese Words
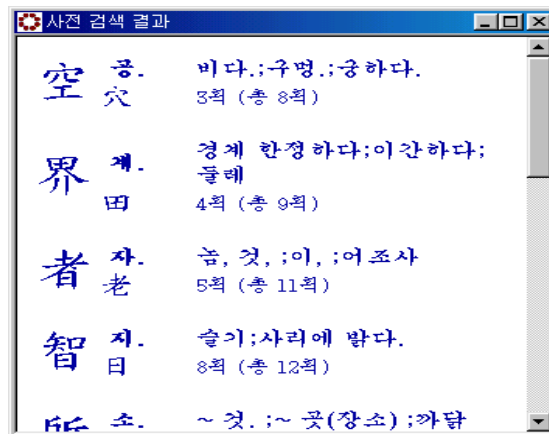


16. Result Screen by Dragging the mouse on a word or setences

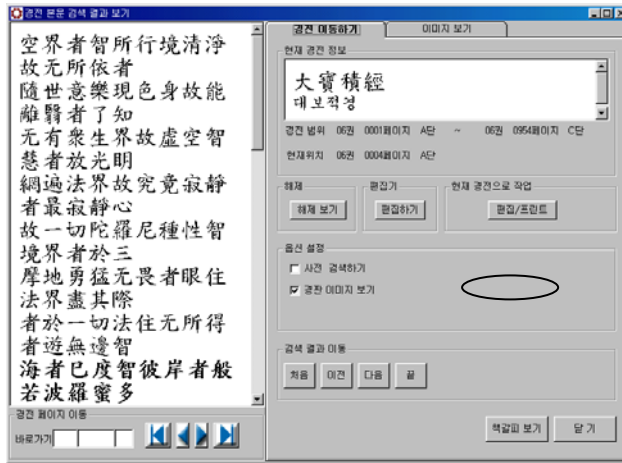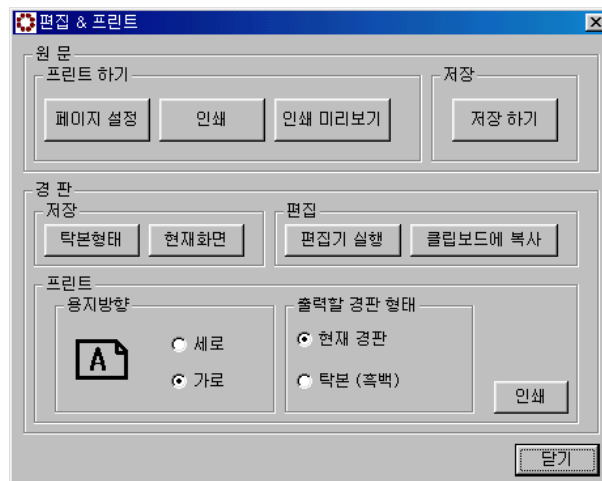F.  Edit, Save and Print Data to be Searched



17. To Click the icon circled



18. The Tool for Editing, Printing, and Saving the Data to be searched

# 3. The Future of Digital Tripitaka Koreana

The institute already made a plan for TK 2002 just after completing the TK 2001. As it has been mentioned previously, the Digital Tripitaka Koreana will move on according to the concept of 'Open Dynamic Text' that the digital texts have usually adopted for its progress. In fact, since TK 2001 was made hastily in order to make up for some defects in its installation and search, we regard it as an intermediate one to bridge TK 2000 to TK 2002.

TK 2002 will afford the more accurate text that is an almost error free Unicode text. In order to make this quality of digital tripitaka, we are carrying out two important tasks; the first one is to proofread the Unicode text by utilizing the variant character version of Tripitaka Koreana more refined from the 4-byte code version and the image version of the photocopy edition. The second work is to compare TK 2002 with CBETA's Taisho. This comparison will be also helpful to CBETA's work and would be the first step to create a modern unified digital tripitaka.

One of the remarkable plans in making TK 2002 would be to afford MS word version of Tripitaka Koreana. We will develop this version based on the past experience to publish the Dictionary of Chinese Variant Characters in Tripitaka Koreana. We could edit this dictionary by utilizing MS word program and found a possibility to implement Tripitaka Koreana in it.

Besides these works, the institute will launch the project to create a digital Korean language version of Tripitaka Koreana. As its pilot project, we already made a XML version of Korean lotus sutra in the middle of this year and are carrying out some Tantric Buddhist texts by the request of Korean Jingak Buddhist Order. Based on these working experiences, we expect that the cooperation with Dongguk Yeokgyoung for linking TK 2002 into Hangeul Taejanggyong will be successfully done.

We are still making an effort to create a standard model of the unified tripitaka by performing the project of Buddhist text DTD in macro and micro. The institute will be able to introduce the more concrete product of this work in the coming EBTI conference in Japan. The institute expects that this model will be examined and refined through the conference by EBTI members' efforts.