

Description:
C.O.T.A.R is a DVD database containing the full texts of articles in the field of Jewish law published in journals not readily available to the general public. The material chosen for scanning was chosen from the yearly bibliographies of outstanding articles in the field prepared by Rabbi Meir Wunder of the Jewish National and University Library (now National Library of Israel) and published in the annual Tehumin over a period of 20 years. The presentation will discuss the preparations necessary before scanning could begin, permissions from authors and publishers, etc., and the challenges presented by the project. Though the articles in the data base are in the field of Jewish Law, their use as primary sources for political, cultural, social and economic history will be discussed.
Before discussing the database COTAR a bit of background is in order.

Rabbinic Responsa provide a rich source of primary material on a number of subjects. Besides the question that resulted in the responsa, information can be found in them on the contemporary social situation, economics, status of the family and just plain history, to mention only a few of the topics touched.

The earliest responsa date from the Talmud, not the usual give and take in the Beit haMidrash, but specific questions addressed to specific Rabbis and their answers. Over the years hundreds of thousands of responsa have been penned. These are found in almost a thousand separate collections. In an attempt to bring some order to this massive body of literature the Bar Ilan Responsa Project began in the mid 1960's uploading the most important collections to the computer. At present over 300 such collections are included in the Project. In addition to the responsa themselves a number of aids are in included in the Responsa Project to assist the user. Among them are an Aramaic-Hebrew dictionary, brief biographies of the Tannaim and Amoraim, the scholars of the Mishna and Talmud, and a bibliography of articles in contemporary Torah journals that are in essence modern responsa. But this bibliography is really a bit of a tease because many of the publications are only available in the most specialized libraries. In an attempt to make this bibliography more useful, in 2004 the Director of the Responsa Project, Rabbi Ya'akov
Weinberger, conceived the idea of developing a database of the full texts of these articles.

One day a couple of months before I retired as University Librarian at Bar Ilan at the end of 2004 Rabbi Weinberger appeared in my office asking for advice. He explained about the project he had in mind and asked if I might recommend someone to be in charge of the scanning part of the project. I said I'd think about it and he left. After a few minutes I said to myself, **dope**, was he really asking for advice or offering you a job! The more I thought about the project the more interesting it seemed to me so I got in touch with Rabbi Weinberger and the retired librarian turned into a part time employee of the Responsa Project.

But work couldn't begin immediately. There were two hurdles to be overcome, financing and obtaining permission from the publishers of the journals to scan the articles. Rabbi Weinberger was able to locate a fund at Bar Ilan whose purpose was the dissemination of Torah literature. It had been established in memory of Herman Hollander, one of the founders of the university and the money needed to start the project was approved.

The question of permission was a bit more complicated. Initial approaches to the publications' managements elicited varied responses. Some were afraid that the proposed database would undermine their publications' circulation and were inclined to refuse. Other publications were overjoyed because they felt the database would greatly enlarge the number of readers of their material. In order to succeed in obtaining permission the assistance of a very respected judge on the B'nai Brack Rabbinical Court was arranged and when he approached the publications no one refused.

All this took eleven months and then I was ready to go to work. First task, choosing the proper equipment. We used a high-end Hasselblad lens and a PhaseOne P45-39 megapixel digital camera mounted on a copy stand. As a matter of fact, that is NOT what we used. That equipment was used by the Rare Book Room at the Van Pelt Library of the University of Pennsylvania to digitize important materials in their collection. Our budget would not allow us to acquire such sophisticated equipment.

I started the search for the equipment on the Internet and located a beautiful overhead scanner for only $10,000. I was promptly told that that was way beyond our budget limitations. So in the end we took an off the shelf Epson 4990 Photo Scanner which cost about NIS 3,000. Before we finished the first phase of the project we were using two scanners with two operators and had two editors checking the work. Scanning was done in bitmap form at 300 DPI and stored as TIFF images. There is no OCR. The main reason is that when searching a responsa someone is looking for a subject and not, for example, how many times a word appears in a certain context, as may be the case in a search of Biblical texts. The responsa titles are fully searchable and subjects from a database of over 2000 items are assigned to each article. With these possibilities it was felt the user could easily locate the information for which he was searching.

Now to the database.
It was given the name COTAR, which, though a real Hebrew word, is in this instance an acronym. Actually, if you asked the man in the street in Israel the meaning of the work \textit{cotar} he probably wouldn't know. It is word coined by librarians and means title. Most people still use the Hebrew phrases for \textit{name of the book or name of the article}. COTAR here, as can be readily seen from the full English title, \textit{Collection of Torah Articles}, is composed of the first letter of each of the first three words of the full title and the first two letters of the final word. In Hebrew it took a bit of ingenuity to come up with a title from which \textit{כותר} could be constructed. The title \textit{כתבי עת ופרסומים תורניים} was probably devised so the first letters of the first and third words could be combined with the first and third letter of the last word to make the name \textit{כותר}. 
COTAR is based on a bibliography that appeared in the annual *Tehumin* for 20 years beginning in 1982. As I mentioned, the responsa contain material on many subjects and the editors of *Tehumin*, whose subtitle indicates that it contains articles on Torah, *Hevra* (Society) and *Medina* (Politics), felt the bibliography would point its readers to additional material in these areas.
The title of the bibliography, **מאיר לציון** (*Mayir leTziyon*), uses the author's names as its basis, as is the case with many Rabbinic works. The author's name is **Meir** ben **Zion** Wunder. Rabbi Wunder, in addition to being a recognized Rabbinic scholar, is also a librarian. He has published numerous works, the best known probably being **Meor Galitsiya**, a four volume encyclopedia of the major Rabbis in Galitsiya. In his early years he was the librarian of the Ramat Gan Religious Council and devised a classification system for Rabbinic literature based upon the Dewey Decimal Classification system while in that position. The majority of his professional career was spent at the Jewish National and University Library. His work on this bibliography was not done as part of his job. Rabbi Wunder felt that a major area of Rabbinic scholarship was not readily available to the public and undertook to publish a bibliography of these works. It first appeared as an independent publication but then **Tehumin** agreed to include it in the annual.

As can be seen from the subtitle, **מפתח למאמרי הלכה פסוקה**, it deals with articles on practical halacha. The internal organization is based on the sections in the **Shulhan Arukh**.
For the first bibliography that appeared in *Tehumin* over 400 periodicals were reviewed. By the last bibliography 20 years later over 900 periodicals were being checked. To give an indication of the variety of periodicals covered by the database we can point to the sponsors of a number of publications in the above list. Publication number 1 is not a periodical at all but a Festschrift, a memorial volume. As it had material that was appropriate for the subject of the bibliography it was reviewed. Publication number 4 is sponsored by a Kollel in Bnai Brack; number 6 by a Sephardic research institute; number 14 by the Vishnitzer Hassidim; number 21 by the Jerusalem Religious Council and number 27 by Rabbinical Council of America.
The bibliography has a number of indices. The Name Index appears on the above page, names including both authors and subjects. The numbers beside the names is the number assigned to the article in which that name appears in the bibliography. Articles would be catalogued and then rearranged according subjects in the Shulhan Arukh Numbers were then assigned. Because of this system there seems to be no visible order to the numbers.
Other indices are follow the four sections of the *Shulhan Arukh*, with additional ones entitled *Contemporary Questions* and a catch all *Miscellaneous* index.

Using the above index as an example we can see that item number one has one article listed.

On the above index page item number 807 has two articles in two different publications listed. Item number 809 has eleven articles from one publication listed.
Sometimes Rabbi Wunder would be very detailed in his listings and sometimes only give one title to a multipart article. The above is a listing of 42 different halachic decisions given by Rabbi Shalom Zalman Orbach, זצ"ל, one of the leading Torah scholars of our time. All these were listed in the bibliography under one title. The scratching on the pages is my indication of the pages of each decision in the original publication so the scanner could treat each one as a separate entity.

As you can see from the way in which articles were entered in the bibliography it would not easily lend itself to scanning. All of this material had to be rearranged so a
person doing scanning could approach the work in an organized manner. The Responsa project's computer people reworked all the material and the result was

In this listing all the articles in one publication are grouped together and listed by the sequence of pages in the publication. The numbers at the head of each listing relate to the original bibliography but with the new order the articles can be easily located.

As most of the periodicals in question were found in the Bar Ilan University Library we set up shop there in space borrowed from the Institute for the Research of Religious Zionism. The Responsa Project is located in another building across the campus. Some periodicals were in their original pamphlet form and others had been bound. As we all know, in the process of binding margins are reduced and this sometimes make it impossible to lay a volume flat on a photo copying machine or a scanner. Part of my job, which pained me very much, was to decide which periodicals had to have their bindings opened and then carefully slit the binding with a knife. Of course we sent the volumes for rebinding at the end of our work. Even with the utmost care some scans came out like this:
There are two problems here: the crooked left margin and the smudge in the lower left margin. Rabbi Weinberger felt we couldn't present a database to the public in this form so set the staff to searching for a program that would correct the problems. A program called Scanfix developed by Pegasus was purchased for $1500 and the end result was:
Now to using the database.

On the second line on the above screen are a number of options. The first we'll deal with is **Tools**.
This option allows the user to determine the language with which he will communicate with the computer. Here for convenience I chose English.

Selecting the **Search** option gives you the screen

![Search screen](image)

The usual search in Title, Author or Periodical Name appear. What is unique here are the **Search for exact words** and the **Advanced** options.

Most Hebrew words are built by adding prefixes and/or suffixes to three letter roots. If you put a search term in anyone of the search options the result will be a list of articles where the word appears in any of its forms.
Here we entered the word שָׁמַרְדָּה.

The result is a list of 13 items (the number of items appears at the head of the list) which include the word in various forms: item 5 has the word in its exact form; item 4 has the prefix ל; item 6 has the prefix ה; and item 8 has the prefix כ.
If we check the **Search for exact words** box we get the following list:

![Search for exact words](image)

which as we can see from the top line has only 9 items, all containing the exact word.

The advanced search screen looks like this:

![Advanced search screen](image)
There are the usual options such as grammatical prefixes or suffixes, etc., but what is interesting is the box marked **Distance**. I use a stupid example to demonstrate this but it gets the idea across. Let's say we want to search for "old shoes". But this might appear as "old men's shoes", old men's brown shoes", old men's scuffed brown shoes", etc. By placing a number in the **Distance** box we can instruct the computer to look for the words with X words in between. This is a Google feature but was in use in the Responsa Project many years before Google developed it.

Also at the right of this screen you can initiate a new search, change the font, color, etc. on the display, as in most systems, retrieve a list of the periodicals included in the database, or if you are really frustrated, request **HELP**. The list of periodicals includes the organization sponsoring it so you can get some idea of its philosophy.

For example we can see that the first periodical in the list is the publication of a Hassidic group which give us some idea of its orientation.

Let's put in a search term under **Search in Article Titles**. We'll use Ramon, our intention being Ilan Ramon, the Israeli astronaut who lost his life when the space mission's space capsule was destroyed when reentering the earth's atmosphere in 2003, not Chaim Ramon who recently resigned from the Knesset.
The result is

one article. On the first line of the listing the four subjects that were assigned to the article appear. By clicking on any one of these you can retrieve all the articles in the database that were assigned that subject. By clicking on the name of the periodical the full text of the article will be displayed.
Ilan Ramon, though not religious, felt an obligation to do something to show he was a representative of the Jewish people while executing his mission. I didn't know this before working on this project, but there is an official Rabbi of NASA. Ilan Ramon posed a number of questions to the Rabbi of which one was, when should Kiddush be made. The earth is circled every hour or so and at this rate Kiddush would be made about every 10 minutes, making Ilan Ramon so drunk that he couldn't execute his duties. The Rabbi, realizing that he wasn't a posek, one who hands down decisions on religious questions, sent Ilan Ramon's questions on to leading Rabbinical scholars in the US and Israel. If you note, on the line at the head of the article itself a total of 29 pages are listed, the NASA Rabbi's response as well as those of the Rabbis to whom he turned for opinions. The decision, in brief, was that time should be observed as in Jerusalem and Kiddush made accordingly.

Another search possibility is using the Topic Index.
Clicking on it will show a screen offering a list of the more than 2000 topics assigned to the various articles. The letter pad at the left of the subject screen lets the user navigate directly to the area of the Aleph Bet in which he wishes to search. For our purposes we'll choose the first subject, אב, father.
We get six articles, the first of which is by Rabbi Ovadia Yosef. Clicking on the periodical’s name brings us the full text of the article.

Other interesting things can be gleaned from the responsa. The Hevra Kadisha of Tel Aviv published an annual report until 2002 which also included articles. Each article would be accompanied by a picture of the author. It’s interesting to see how some of today’s Rabbis looked 20-25 years ago.

Here is a picture of an author as he appeared then. You might recognize him.
Here is a picture of him arriving in Haifa in 1946 at the age of 7 after being freed from Buchenwald.
And here he is today on the jacket of his book about his experiences back then.

Rabbi Yisroel Meir Lau, former Ashkenazi Chief Rabbi of Israel and now Chief Rabbi of Tel Aviv.

We have a sample site on the Internet where 2000 of the 10,000 articles in COTAR appear. All of the search capabilities aren't available there but the site will give you an idea of the contents of the database. The URL is
Work on the database continues. The complete bibliography contains over 20,000 articles. The first edition of COTAR includes 10,000, but none from the two years prior to issuing the database as per the request of the editors of the periodicals. We are now working on the remaining 10,000 as well as adding articles from more recent years to the periodicals already scanned.

We are also planning an online version which will be available through the firm CDI Systems which distributes the online version of the Responsa Project.