

# The Importance of a Yiddish Technological Language

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## 1. Introduction

Today, the study of Yiddish is almost entirely confined to so-called "literary" materials, i.e., fiction, biography, linguistics, and so forth. Why then, -- one may ask, -- does Yiddish need technological terminology? It is a non-territorial language. It has no industry or technology... Well, it's all a matter of completeness, and this affects how it develops, and how it is seen, depicted, and ultimately, -- treated.

Let me explain this further, by referring to an article written in 1965, by my father David Botwinik, published in "Oifn Shvel" [\*-4-\*]. Here he discussed this very problem with respect to the Yiddish educational systems in the USA and Canada, -- why, in essence, there is no continuation: - no new writers, journalists, or, for that matter, readership, even though several generations of students had already gone through the Yiddish secular school system in North America during a period of around 60 years. (my translation):

[...quote ...]

"The first Yiddish schools were in the afternoon.... where they taught Yiddish, Yiddish literature, Hebrew, a little Bible, about Jewish holidays, Yiddish songs, and such. Arithmetic and geography in Yiddish was not taught like in Poland, in the Jewish day schools -- or religious "kheyder", for that matter -- because this was taught in English in the public schools. Therefore, the concept that Yiddish was only a language for literature, tradition, shtetl, grandparents, but not for science, geography, technology or even arithmetic, became embedded in the minds of the children, the parents and even the teachers."

[...end quote ...]

If Yiddish has no technical language, he argued, then it would be of little practical use, and would be condemned to be a secondary or second-class language. In our modern technology-oriented society, this would be a death-knell for the living language. In the article, he then

went on to emphasize the need to make those missing subjects part of a daily program in Yiddish. -- Even if taught in a condensed format (because the subjects are already taught in English), this would make an important difference.

His call, however, went unheeded, making the teaching of Yiddish incomplete.

Nevertheless, in our modern society, technology and science constitute a major source of news and literature, and it is only natural that a Yiddish technological language develops independently and is used on a daily basis. This is in fact attested to, as recent articles in all the major Yiddish newspapers include discussions of medical breakthroughs, nuclear weapons and technology, computers and the Internet, space exploration, and the environment.

As well, many, many dozens of books on science and health have been written in Yiddish during the last hundred years, designed to both instruct the uneducated and aid the teacher. There is no justification for the scientific side of Yiddish writing to be ignored.

From a linguistic point of view, there is a wealth of material which needs to be studied and cross-referenced. Take for example the fact that the Yiddish scientific and technological books, publications and articles were written and read by Jews in more than 30 countries around the world.

How do they differ? In which ways are terms in America and in Russia similar? What other aspects need to be traced?

What's more, how can scholars study what has already been written in Yiddish without a ready reference? And how can Yiddish continue to express and develop a standardized technical language without the guiding influence of an up-to-date and modern reference work of scientific terminology?

To answer these questions, we shall first make a quick survey of the several stages of development of technical language in Yiddish, and follow this up with a discussion of present trends and our work on a Yiddish-English/English-Yiddish Dictionary of Chemical Terminology as a major **first step** in filling a great void in modern Yiddish pedagogy and linguistics.

## 2. Stages of development of the Yiddish technological language

### Pre Holocaust (1900-1939)

- Most Yiddish books concerning science were printed in the first half of the century, especially in the 1920s and 1930s. The reading masses, wanted to be kept informed in a general way about current developments in Science.
- We have, for example, the Arbeter Ring in NY publishing a series of popularised scientific books. In 1917 "Fizik" [\*-5-\*] and in 1918 a 2-part set "Geologye" [\*-6-\*], both by Dr. Abraham Kaspé. And in 1920 a chemistry book by Sol Feinstone, "Khemye: Tsu lezen un tsu lernen" [\*-7-\*]. This includes a section on Organic Chemistry and a Dictionary of Chemical Terms in which he tends to borrow heavily from German.
- At approximately the same time, we find "Himl Un Erd (Astronomie Farn Folk)" from 1918, by Philip Krantz [\*-8-\*]. His general language usage is also influenced by German, but there is a strong influx of French, especially in his choice of terminology and suffixes. For example: "konstelatsyon", "iradiatsyon" and "gravitatsyon" (which, in modern Yiddish is now: "konstelatsye", "iradiatsye" and "gravitatsye"). He does acknowledge in the forward [p. IV], that his work is based on over 10 years of reading Astronomy texts in French, English and German. The book was apparently a big hit, and sold out at least 2 printings, with the 3rd printing appearing in 1929.
- In 1931 the New England telephone company in the US, published a booklet with instructions in Yiddish on how to operate the new rotary-dial telephone [\*-9-\*]. For example:

1. dial	redl
2. to dial	redlen
3. exchange	gegnt tsentrale
4. receiver	traibl

Almost all of the terms are still used today in proper Yiddish.

- Many texts served a very practical function: such as preparing technicians in the Vilna ORT and technical institute. Or, work and study texts for students of Mechanical Engineering, Mathematics, Biology, Chemistry, etc. in Poland and in the Soviet block countries.

- Such a work is the college-level chemistry textbook published in Minsk, in 1931, by Shmuel Brokhes entitled: "Khemye Loytn Laboratorishn Metod" [\*-10-\*]. This included several hundred pages of chemical concepts, each followed by laboratory experiments and questions for the student
- Another example, is a biology "catalog" of the Yiddish High-School in Vilna from 1938 which gives comparative biological terms in Latin, Polish, and Yiddish [\*-11-\*]. Interestingly enough, this book also laments the lack of Yiddish scientific/technological texts, and subsequently also includes an introduction discussing the problem of inventing new terminology. One case in point is the humorous rendering of the micro-organism named "stentor", which is shaped like a horn. In Yiddish, the book calls it "shoyferl" (little shofar).
- Of course, we can cite many more texts and workbooks used by students, chemists and engineers, as well as popularizations for the masses. All the excellent starts came to an end, however, in Eastern Europe, due to the Soviet crackdowns on Yiddish, and the mass extermination of Eastern European Jewry by the German army and their helpers during W.W.II. And in America, English became the primary language of the Jewish masses, due to the great assimilation and the fact that the curriculum of the schools did not include math or sciences.

### **Post Holocaust (1945 to the Present)**

When we look at what was published vis-a-vis science, nature, technology, etc. from the 1940's on, we see that there is still new material written in Yiddish.

In 1965, we find Sol Podolefsky's "Di Velt fun Visnshaft un Visnshaftlekhe Teoryes" [\*-12-\*], a compilation of articles concerning the latest developments in (his words) "astronomye, geologye, biologye", and "kosmogonye".

In the 1970's, new young Yiddish writers take up the challenge with essays and stories on environment, computers and robotics [\*-15-\*].

From 1978-1982 a magazine-style publication, "Der Nayer Dor" includes regular Science columns and Science Fiction stories. We find

here articles explaining digital electronics, binary arithmetic and a computer flow-chart in Yiddish, articles on chemistry and some math puzzles, as well as space-travel and tele-communications terms. This is a new age for Yiddish technical writing.

In late 1980, a completely and intensely technological article is presented in *Afn Shvel* [\*-17-\*] - written by Dr. Hershl Herbst. In the 100 line article, entitled "**Di tekhnologie un der morgn fun Yidish**" "Technology and the future of Yiddish", we find about 70 instances of scientific or technological usage, from a base of at least 39 different technical terms, 16 of which are footnoted in an English-Yiddish glossary at the end of the article. We have, for example: "keyfl-keflayim = several orders of magnitude", "gegebene = data", "ahin-krik-televizie = 2-way TV" "keshene-iberzetske = pocket translator".

In 1987, the renowned Yiddish specialist and teacher, Dr. Mordkhe Schaechter of Columbia University, contacts about 30 Yiddish knowledgeable persons who have had some contact with computers, with a request to participate in the preparation of Yiddish terminology for Computer users.

Many of the participants providing responses to the terminology request are young members of the Yungtruf Youth for Yiddish movement in America. A preliminary list is published in the Yungtruf magazine's "oyfn ekran" computer column [\*-21-\*].

We then begin to find these terms used again and again in various forums. For example, in 1988 in Israel, a new Hebrew-Yiddish phrase book "Sikhon Ivri-Yidi" is published [\*-22-\*]. We find here, computer terminology from the new, recently published list.

For example:

* software	- dos programvarg
* dot matrix printer	- der pintl-opdruker
* word processor	- vortir-program

To aid the Youth for Yiddish Movement in speaking Yiddish correctly, Dr. Mordkhe Schaechter's League for Yiddish publishes the English-Yiddish dictionary "Trogn, Hobn, un Friike Kinder-yorn" in 1991 [\*-23-\*]. Though designed as a guide for new parents on Yiddish terminology for childrearing in everyday life, the dictionary includes many highly technical medical and biological words.

And while we're on the subject, most major Yiddish newspapers carry a regular column about medical problems and their solutions. All sorts

of biological and medical terminology is freely used. Our parents have absorbed, through the Yiddish press, a vast knowledge of these areas. Forget about the "my-son-the-doctor" jokes. Think rather about "my mother the doctor"...

The next great step forward, in our timeline, is the Internet (followed by the WEB). Yiddish academics, and later just plain everyone, begin communicating on the Internet lines in and about Yiddish. The first list is called "mail.Yiddish" run by David Sherman from 1988-1992 [\*-24-\*].

A new list, Mendele, -- named after the great Yiddish writer Mendele Moykher Sforim, appears in April 1991 [\*-25-\*], and by 1997 has more than 1200 subscribers worldwide.

From 1993 on, Yiddish begins a presence on the World Wide Web, with **Virtual Shtetl** by **Iosif Vaisman** [\*-26-\*], and close to **50** other websites, with more sites appearing on a regular basis [\*-28-\*].

In 1996, through the efforts of a new breed of technological Yiddishists, a mailing list called **UYIP** (Understanding Yiddish Information Processing) is created by Mark David [\*-29-\*]. Here, discussions are carried on, on all aspects of Yiddish computer-related problems.

In 1996, a new children's magazine "Kind\_un\_Keyt" is launched [\*-30-\*], with a regular column on computers and the Internet, in an easy Yiddish for a young audience. The magazine is distributed to teachers of Yiddish in Israel, and reaches at least 3000 pupils in the elementary and high-schools.

In 1996, a trilingual English-Hebrew-Yiddish computerized picture dictionary **Arye-to-Zebra** has its user interface translated to Yiddish [\*-31-\*], making it the first complete Yiddish computer program for Microsoft Windows. It includes complete installation instructions in Yiddish and a user's guide with examples for teaching. It has been distributed to the Yiddish teachers in Israel and other countries.

Beginning in summer 1997, the Yiddish radio program on Kol Yisrael launches a 10-minute, monthly program "der yidisher kompyuter vegvayzer", about computers, Internet and the World Wide Web [\*-32-\*]. The program is broadcast nationally and internationally.

### 3. Prospects for tomorrow

And now, I'd like to focus the final part of our presentation on our research and preparation of a Yiddish-English/English-Yiddish Chemistry Dictionary, and of the English-Yiddish-Hebrew glossary of Computer and Telecommunications Terminology.

As we have discussed, there is a tremendous influence of Science and Technology on our everyday lives and lifestyles. However, a question arises: Although general knowledge may be useful, how important are highly technical terms? Do we need to know how to conduct a chemistry experiment in Yiddish? Do we need to know how to take apart and put back together a sophisticated telecommunication device, using Yiddish as the language of explanation? Are such terms actually being used, and/or will they be of use to anyone?

Well, the answer is a positive one: Yes, the terms are actually being used, as the following cases will show:

For the past 20 or so years, since the late 1970's, I've personally been using Yiddish scientific terminology in my fiction and non-fiction writing, in trying to explain to my father and his friends what exactly I do at work, and also in my day to day work, when in contact with other Yiddish speaking technologists.

As an example, at Tadiran Telecommunications, I usually employ Hebrew to train new workers on software and hardware tools we use on sophisticated digital telephone exchanges. On occasion, I explain the tools in English. More recently, I conducted a 3 day intensive tutorial course on Telephonics and the specialised tools we use, almost entirely in Yiddish!

In an other case, a co-worker told the following story:

He and his family are recent immigrants from Russia. Several years ago, there was a country-wide electrical power outage across most of Israel. His mother, an electrical engineer from Russia, specializing in high-voltage power systems, was called in to assess the situation and advise the Israeli engineers. When she and the Israeli chief engineer began discussing the problem, they immediately realized that the only language they could both communicate in, at an advanced enough level, was: Yiddish.

As previously mentioned, the Yugntruf Youth for Yiddish members actively discuss these and other terms, and have collected over 270 computer and Internet terms [\*-33-\*]. I myself am working on a similar list, in English, Yiddish and Hebrew, which also includes telecommunications and telephonics terms.

In an independant effort, the young Dr. Stephen Cohen of the Dept. of Chemistry at Rutgers U., decided to find out what was (and wasn't) available vis-a-vis Yiddish scientific terminology. In 1995, he sent out a feeler on the Mendele Internet list [\*-34-\*] to find out about Yiddish scientific texts, and invited Yiddish speakers with a scientific background to help him as potential advisors to put together a glossary of several hundred general science terms in Yiddish.

After more than 2 years of research, consulting two dozen Yiddish texts in the physical sciences, as well as several general-purpose dictionaries, and with the aid of 4 assistant editors, all knowledgeable in Yiddish, engineering and chemistry [\*-35-\*], -- he has compiled a modern Yiddish-English/English-Yiddish chemistry dictionary. The preliminary version encompasses over 4000 chemical terms. The assistant editors offered suggestions for the best choice(s) among the various possibilities; if no possibility was available, a new term was invented.

Although the scope of the dictionary is primarily chemistry, it includes words from allied disciplines, such as physics, astronomy, biology, geology, and engineering.

As a sample of the possibilities provided by the compilation, he has prepared an article on "using science in everyday Yiddish", incorporating terms from electrochemistry. As well, he has prepared a sample chemistry experiment complete with a diagram and instructions. This work has already been published by Sholem Berger on a new electronic on-line journal on the World Wide Web called \_Der Bavebter Yid\_ [\*-36-\*].

Interestingly enough, we get the feeling today, that we've gone right back to the old drawing board, and must restart all the work which was done back in the 20's and 30's. Let me quote a passage from Phillip Krantz' "himl un erd" (in my translation, from the Yiddish) [\*-37-\*]:



"... In our "Mame Loshn" (mother tongue=Yiddish) we are missing what is called "TERMINOLOGY". This comes about mostly, because we don't yet have school books in Yiddish. Therefore, every writer of, let us say, Geography, Physics, Chemistry, etc. must himself 'bake' such words, which we call "TERMS" which are generally acceptable in every literary language" [p. IV]

Dr. Cohen, has collaborated with me on this presentation, and I am working as an advisor on his chemistry dictionary project. We both agree that what is needed today is an up-to-date comprehensive collection of technological terms. We feel confident, that such a modern dictionary would be both a source of inspiration and of direction for Yiddish speakers, writers and readers using and/or trying to understand the Sciences and new telecommunications technologies.

With such an important resource to guide the Yiddish writers and speakers, it will again become natural, familiar and 'heykish' to hear two or more people discussing sophisticated scientific and technological subjects in Yiddish, -- whether at the local computer-shop, or at the barber-shop or newspaper stand.

We'll be hearing terms like:

- internets = Internet
  - kompyuteray = Computer Science
  - blitsbriv = Email postings
  - vebpletser = Websites
  - desalinirn = Desalinate
  - atomisher tsunoyfshmelts = Atomic Fusion
  - solarer baheytser = solar heater
  - lazer-khirurgye = Laser Surgery
- and a lot more...

32 years ago, when I was almost 7 yrs old, my father wrote of the need to introduce Yiddish Science subjects in the existing Yiddish school curriculums. Today, my oldest boy is also almost 7 years old. 32 years from now, he will not be one of only a few with a Yiddish science background. He will be one of many, because we are now actively preparing the way!

[One final note: I expect to complete the Yiddish version of this presentation in the next few weeks for publication. Could it be otherwise? ken es zayn andersh?]