

## Hebrew Hieroglyphics

This article presents a walk-through of sample mini-lessons in an innovative method for teaching foreign language, along with brief remarks on its success in trial runs. The main innovation of the method is its use of reading as starting point. The mini-lessons cover four stages: a pure hieroglyphic stage, a linearized hieroglyphic stage, a key-letter stage, and a phonetic stage. The method is directly applicable to language with different writing systems, such as Hebrew, Arabic, Japanese, or Chinese. But it also has radical implications for the teaching of foreign languages generally, since the sequencing of stages precisely reverses the accepted curricular ordering not only in all of these languages, but also in European languages and in English as a second language.

### 0. Background

This article presents an example of an innovative method for the teaching of foreign languages, called “ungrammar,” which I have been developing over the last several years. Perhaps the most innovative aspect of ungrammar is its use of reading: where reading is widely regarded as a secondary and advanced skill, ungrammar integrates it into the very beginning of the learning process, giving it partial primacy. (A second aspect of ungrammar is the way it bypasses linguistic structure, focusing radically on lexical items (contentives) as the key to learning as well as proficiency.)

The rationale for the method is quite simple. Written language has long been recognized in foreign language teaching theory as separate from spoken language (e.g., Gelce-Murcia & McIntosh, 1979). Its practical importance is becoming recognized: it is no longer regarded as a mere visual representation of speech, but rather as a partly separate structure, drawing on separate skills. It is, for example, more directly related to meaning. Though the call has thus been out for curricular sequencing more flexible than the outdated speaking-before-reading sequence, in practice reading does remain an advanced skill in most curriculum. In particular, psycholinguistic reading skills such as skimming and scanning, or more generally the guessing (inferring) of textual details (see esp. Smith, 1973), have been relegated to advanced levels.

Psycholinguistic approaches to reading anticipate ungrammar since they regard linguistic structure as actually *interfering* with linguistic skills, as opposed to the traditional and common-sense view of structure as being a component of the skill. A similar assumption, in the medium of spoken

language, is behind Terrell's "natural approach." The latter, at least, proclaims the harmfulness of emphasis on structural detail especially at early levels of foreign-language curriculum. It does not recognize, however, that principles of psycholinguistic reading can be taught explicitly and effectively at elementary curricular levels, and indeed that such sequencing offers a magnificent opportunity not only to broaden and deepen the learner's input, but also to give a more profound, better-rounded definition to the language skills and language-learning skills assumed. The goal, then, of ungrammar is to take full curricular advantage of the cognitive power of visual perception, as expressed in reading; to make reading a contributor to more powerful foreign-language learning, rather than a further complication.

To actualize this methodological goal my experiments have focused on various linguistic levels (orthographic, lexical, syntactic, pragmatic), using various languages (Spanish, Russian, Chinese, Arabic, Hebrew, and others). They have mostly taken the form of mini-lessons of 1/2 to 2 hours in length; some 300 subjects have done one or another mini-lesson. Hebrew happens to offer the greatest opportunity on more different structural levels, so I was able to construct and test a full curriculum based on the approach; for similar reasons it is an ideal choice for exemplifying ungrammar and its broader implications.

At one point I attempted comparative validation, and the results supported ungrammar in both expected and surprising ways. But I soon concluded that statistical approaches offer less insight than individual reports of subjects, which had already played a key role in eliminating bugs from the method. Some 30 of the subjects experienced either inability to follow the instructions of the mini-lesson, or failed to learn from it; this especially occurred in very early versions. In somewhat later versions all subjects would learn successfully, but some (interestingly enough, more linguistically sophisticated) subjects would feel uncomfortable about their knowledge. (Particularly interesting was one group of 8 in which 2 subjects had studied the language for several years, and rejected the approach; after the 2-hour mini-lesson, the others were outreading them.) For the majority of subjects, however, these major problems have been ironed out, and over 9 out of 10 subjects invariably learns successfully, and feels amazement at how easily they have learned "exotic" and "difficult" languages. After the 1/2 to 2 hours of any mini-lesson, each of these subjects is able to understand structures in a new foreign language that they would not have encountered for a semester or more in traditional approaches.

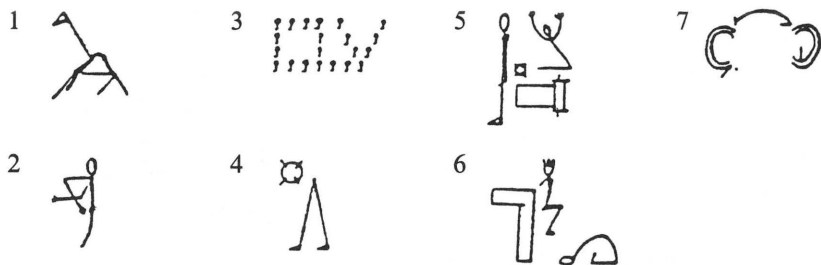
My briefest mini-lesson is a single Russian sentence (in transcription): *Professor russkoy literaturi daët novuyu gazetu moey sestre Ol'ge*, where *daët* = give, *moey* = my, *novyy* = new, . . . Sometimes when I have just translated *daët* some members of the audience are already guessing that the

sentence means: “The professor of Russian literature gives the new newspaper to my sister Ol’ga.” Some do not like how irresistible this mini-lesson is: they want to know why it means this, in terms of structural detail; or they note that I have relied heavily on cognates. But the use of cognates is a useful and accepted trick of Russian teaching; more to the point, even a textbook relying on them (e.g., Levin & Haikalis) would not be able to present all the structural detail contained in this easy sentence (conjugation, accusative and dative case, adjective agreement) in less than a semester. The astounding time contrast precludes dismissing the example as a parlor trick, even though it does not in itself spell out how a whole curriculum would have to be structured.

However, I will here present an extended, more elaborate example, showing the interaction of various linguistic levels. To save space, the example is a walk-through, leaving out some of the reinforcement exercises that the full mini-lesson contains. The reader, for full effect of the method, is urged to use flash cards, etc., so as to see how genuinely easy and effective it is. (If you know *any* Hebrew, you should disqualify yourself and let a friend do it—and watch the results.) I purposely postpone any further discussion of the language or the method: the reader’s task at this point is simply to work through the mini-lesson; as in any learning, success depends partly on amount of learner effort.

## 1. Hebrew Hieroglyphics

Can you match the hieroglyphics with their meanings?



Meanings for matching:

- |   |                       |   |        |   |                         |
|---|-----------------------|---|--------|---|-------------------------|
| a | righteous             | b | people | e | camel                   |
|   | (upright & humble,    | c | hear   | f | king                    |
|   | enlightened by books) | d | not    | g | alive                   |
|   |                       |   |        |   | (walking under the sun) |

Answer: a-5, b-3, c-7, d-2, e-1, f-6, g-4.

How many of the following sentences can you translate? (Begin at right)



You are allowed to add grammatical endings to make the translation sound natural in English: translations should always express meanings the way English does. In the same way you are allowed to add grammatical words like "is," "a," etc., and even make adjustments in word order. The following fill-in should confirm your answers:

- 1 The ---- -s a ----.
- 2 The ---- does ---- the ----.
- 3 The ---- is ----.
- 4 The ---- is ----.
- 5 A ---- -s the ----.

“Is” and “are” are not expressed in Hebrew; did you think to supply it even before you saw the fill-in? Did you think to change the order of the first two words to fill in in sentence 5?

Whether you say “hear” or “heard” is inconsequential; Classical Hebrew (however strange this may appear to the speaker of English) simply does not express time in the verb-form, and both answers are equally correct, if no context is provided. (Classical Hebrew is an aspect language, expressing, in its verb forms, the distribution of action in time.) Similarly for “the” and “a”:

Hebrew does express “the” with the particle **לְ**, but its usage does not quite correspond between Hebrew and English. So, to the extent that it’s important at all, it’s best to rely on context. (This is not a problem, since many languages have no articles at all, e.g., Russian and Japanese.) You may have noticed another particle, **אֵל**; it must be ignored in translation.

**Later Development of the Hieroglyphs**

In the later development of the writing system the parts of the hieroglyphs become linearized; later still they become stylized and simplified so that, like modern Chinese characters, they are no longer recognizable as pictures at all. Can you: (a) match middle-period forms in column 1 with the modern forms in column 2, and (b) fill in the translations for the modern forms in column 3? Try not to look back, and write in the translations only in column 3.

1 linearized	2 modern	3 meaning
	שמע	_____
	הָיָה	_____
	רָאָה	_____
	יָדָעַתְּ	_____
	לָךְ	_____
	לָא	_____
	שָׁמַעְתָּ	_____
	הָיָה	_____

Answer: first letters of answers, in order, are: c-a-p-r-k-n-h.

How many of the following words can you identify in their modern form?

4. שמע

1. לא

5. גמל

2. מלך

3. צדיק

Answer: 1-not, 2-king, 3-righteous, 4-hear, 5-camel.

How many of the following sentences (middle period in A, modern in B) can you translate? You may have trouble as the particles become part of the linear sequence, especially in sentences 10-20.

1-A הַ עַם לֹא יָדָע לִשְׁמֹעַ אֶת הַ מֶלֶךְ

2 הַ מֶלֶךְ יָדָע לִשְׁמֹעַ אֶת הַ מֶלֶךְ

1-B הַ מֶלֶךְ שָׁמַע אֶת הַ עַם

2 הַ מֶלֶךְ חֵי

3 הַ עַם לֹא צָדִיק

4 הַ עַם לֹא שָׁמַע אֶת הַ מֶלֶךְ

5 עַם צָדִיק שָׁמַע אֶת הַ מֶלֶךְ

6. המלך שמע את הגמל.
7. הגמל חי.
8. המלך לא צדיק.
9. העם לא שמע את המלך.
10. העם צדיק.
11. העם שמע את המלך.
12. המלך הצדיק שמע את העם.
13. צדיק המלך.
14. שמע המלך את העם.
15. הגמל לא שמע את המלך.
16. המלך הצדיק חי.
17. העם שמע את המלך הצדיק.
18. המלך לא צדיק.
19. הגמל שמע את המלך.
20. המלך חי.

## 2. Key Letters

Sentences 10-20 above represent regular Hebrew spelling, as adults confront it. You are already reading (i.e., comprehending) regular adult Hebrew; in case you are also interested in pronouncing it, this section will teach you how.

Although not widely known, Chinese “picture writing” actually contains some indications of pronunciation. So, too, the Hebrew hieroglyphs and their modern forms. Two important such indications are:

ש ש ש s (or sh)

מ מ מ m

Can you match the following names with their English equivalents? Note that Hebrew is written backwards—but don't expect a one-to-one correspondence between English and Hebrew letters.

- |          |                     |
|----------|---------------------|
| 1. מימון | a Israel (Yisra'el) |
| 2. ישראל | b Semite (shemi)    |
| 3. שמשון | c Maimon            |
| 4. שמי   | d Samson (Shimshon) |
| 5. משה   | e Moses (Moshe)     |

Answer: 1-c, 2-a, 3-d, 4-b, 5-e.

Can you match words you know with their pronunciations?

- |        |                      |
|--------|----------------------|
| 1. גמל | a shama (or shome'a) |
| 2. מלך | b gamal              |
| 3. שמע | c melekh             |

Answer: 1-b, 2-c, 3-a.

Translate and pronounce:

המלך שמע גמל.

“The -----s a -----”

Ha----- (Ha--elekh -ha-a ga-al)

Can you match these additional names?

- |          |                    |
|----------|--------------------|
| 1. שלמה  | a Shoshana         |
| 2. ששון  | b Solomon (Shlomo) |
| 3. שושנה | c Sason            |
| 4. שמואל | d Saul (Sha'ul)    |
| 5. שאול  | e Samuel (Shmu'el) |

Answer: 1-b, 2-c, 3-a, 4-e, 5-d.



How many of the following sentences can you translate?

1. שאול המלך שמע את עם ישראל.
2. שמע עם ישראל את המלך שאול.
3. חי הגמל.
4. שושנה שמעה את הגמל.
5. המלך שאול לא צדיק.
6. צדיקה שושנה.
7. שלמה מלך ישראל.
8. שלמה מלך ישראל צדיק.
9. משה לא מלך ישראל.
10. עם ישראל שמע את המלך שלמה.
11. עם צדיק שמע את המלך הצדיק.
12. עם ישראל חי!







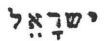




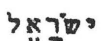

עם ישראל חי  
עם ישראל חי!



The above sentence (presented in traditional and modern type-styles) is the name and main lyric of a popular Hebrew song. The last word is also used in a popular neck-ornament. You should be able to read it now, and also the name of the country on the accompanying stamps.

### 3. Vowel Points

Sets of diacritics are used to indicate vowels and other details of pronunciation. The following such points, placed under a letter, indicate a following vowel:

 or 	<i>a</i> as in father	 S__son
		 Sh__'ul
		 g__m__l
		 sh__m__
 or 	<i>e</i> as in met	 Shmu'__l
		 Yisr__'__l
		 m__l__kh
In addition,	 sh	 Mo__e
	 s	 ____on
		 ____lomo
		 Yi__r__'__l
		 _____
		 _____i

Note that the Hebrew pronunciation is often completely different from the Hebrew: (match)

shemi	Solomon
Shlomo	Semite
Shimshon	Moses
Moshe	Samson

Read the following sentences out loud:

1. מִשָּׁה שָׁמַע גָּמַל. ( הַ- ha- )
2. שְׁלֹמֹה הִמְלִיךְ שָׁמַע אֶת יִשְׂרָאֵל. ( אֶת et )
3. גָּמַל שָׁמַע אֶת שְׂאוּל.
4. הִמְלִיךְ שְׁלֹמֹה שָׁמַע אֶת שִׁשׁוֹן.
5. שָׁרָה שָׁרָה שָׁמָּה. ("Sarah sings there." 'sing' = \_\_\_\_\_ra)
6. שֶׁמֶשׁ מְשַׁמֵּשׁ שֶׁמֶשׁ. ("The sun serves as sexton.")

### 3. Implications

I will now summarize the reactions of the 100 or so subjects who have learned Hebrew through this mini-lesson (in one or another version). It is recommended that the reader jot down any reactions before proceeding: What do you feel you know? What can you do? Were the three sections of the mini-lesson equally difficult? (This last question is specially interesting.)

The most important single result is that regular adult text in a foreign language can be read (i.e., comprehended) after short study: this is proved within section 0. This is a dramatic result in itself, especially since such text is not encountered in regular curriculum for several years of study. (The reason for this will be mentioned below.) Even in languages using the Roman alphabet, meaningful sentences are not always encountered within the first half-hour of study.

Section 1 merely proves additionally that a whole-word approach can be structured so as to incorporate later shift to partial (i.e., highly selective) phonics. The key-letter system exemplified in section 1 makes word-recognition open-ended, and indeed supportive of oral learning, in a way that traditional whole-word teaching cannot be.

The main conclusion to be drawn, then, is that elementary language teaching can by-pass structural detail, especially if it takes full advantage of the cognitive power of reading process. Students who have begun with this kind of reading-based approach can be expected to make, with ease, the transition to fluent reading that few current students make at all. Students who have studied my full semester's curriculum retain their ability to comprehend, and also pronounce.

Indeed, the very act of learning is more enjoyable from the beginning because it is meaning-oriented; there need be no excuses about sharpening grammatical tools that can be used only in the distant future (or more likely, not at all).

Further details of the mini-lesson carry this point further: although based in specific consideration of structures unique to Hebrew, they are directly applicable to any other foreign language (including English as a foreign language).

The overwhelming majority of my subjects report that section 2 is substantially more difficult than 1-2. Indeed, they mostly feel that whatever success they have in understanding the explanations and doing the exercises in section 2 derives completely from the proficiency acquired in sections 0-1. (Thus, in particular, sentences 6-7 in the final exercise are especially difficult, although actually simpler orthographically.)

This is a curious conclusion, as one can see by noting that section 2 represents the first step in a traditional Hebrew curriculum! Indeed my whole mini-lesson is a precise reversal of the traditional curricular order: (a) vowel-points and phonetics, (b) words as sounds, (c) words as meanings, and (d) sentences. (The accepted curriculum for English as a second language is parallel: phonics, words as sounds, etc.)

Note that regular adult Hebrew is what appears at the end of section 0 (and in section 1): the vowel-points are used in children's books, and native speakers are notoriously weak in them. They are nevertheless inflicted on non-native learners, as an aid (with the exception of native-language illiterates, oddly enough). In most curricula learners are protected from the regular adult consonantal text till the third year of study or later.

Because of its system of vowel-points, Hebrew allows us to explicitly consider an issue that is relevant to English and other languages as well, although difficult to consider within them. Consider the plight of the Vietnamese learner of English, confronting *take* and *took*. What does it avail to know the phonetic values of the vowels, when these are an irregular representation of a grammatical category (verb tense) that does not even exist in Vietnamese? The obvious solution to this three-story torture chamber is for words to be presented without vowels at elementary stages: *w tk yr bk*. This compact orthography evades various structural complexities of English (written or spoken), even while giving learners practice in high-level psycholinguistic reading (Cf. Smith, 1971, 1973.) After all, adult native-speakers can read vowelless text with increased, not reduced fluency: #f y## #r# #xp#r##cn#ng d#ff#c#lt# #n #tt#mpt#ng t# d#c#ph#r th#s m#ss#g#, th#n y## #r# h#ld#ng th# p#g# T## D#RN CL#S#!

What the modified orthography does is bring the learner immediately to the adult native speaker's mode of visual processing, by-passing linguistic childhood. Of course for English this orthography is terribly contrived, but for Hebrew it is the norm, affording this interesting test-case for ungrammar. (In pedagogical contexts, it too generates resistance among traditionalists, but that is a separate question.)

The hieroglyphic orthography of section 1 is completely imaginary: the hieroglyphs are simply iconic characters that I designed off the regular Hebrew spelling. They seem to serve as a useful way to force whole-word, semantic reading from the beginning. Even in the full-semester course, they were found to be helpful, although introduced along with orthographic spelling in later lessons. More abstractly, of course, they are a direct representation of lexical meaning, and in this sense represent fully adult reading process.

My subjects' results suggest that the traditional curricular ordering is in error. This conclusion would apply to curriculum in any foreign language, including English, albeit with changes in detail. The crucial point is that psycholinguistic reading principles can be translated into the terms of elementary foreign-language curriculum: the most important linguistic skills can also be the easiest.

I confess that the innovative ordering requires considerable contrivance: making up hieroglyphics can be difficult. Quite unlike Natural Approach (Terrell, Krashen, etc.), considerable care must be taken to sequence the material correctly, and explain in the right way. To recall the most dramatic example: in the earliest versions, heavy psycholinguistic ideology was followed by a command to translate. Some subjects simply refused to believe the ideology, and could not translate. When I eliminated the ideology, and instead innocently asked, "How many of the following sentences can you translate?" this type of resistance simply disappeared, and average results shot up from 15% to 85%. More generally, it is easy to overshoot a given learner, and thereby frustrate him: I know this well enough from teaching psycholinguistic reading to advanced ESL students and native speakers.

But, whether subtly and successfully, or with great futile waving of ideological swords, I often find myself battling a cognitive linearity that is as widely appealing as it is illusory: the misconception that any knowledge or skill can be broken down into tiny discrete pieces (increments) that can then be absorbed one by one. Aesop's tortoise is the hero of this myth. Its most harmful assumption is that all the little pebbles in the road must be stepped on along the way, i.e., that it is useful, if only psychologically, to achieve complete command of details in a limited domain, before attempting development of mature skills. The thought that these skills might actually be *easier* to achieve directly is met with widespread disbelief.

But reading, like visual perception generally, proves the cognitive power of holistic thinking. Ungrammar, with its basis in reading process, merely feeds this power back into the process of foreign-language learning. Detailed work is needed to make the method work; in this sense it is not a natural approach, although it does—when successfully contrived—easily elicit the natural language skills of learners.

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