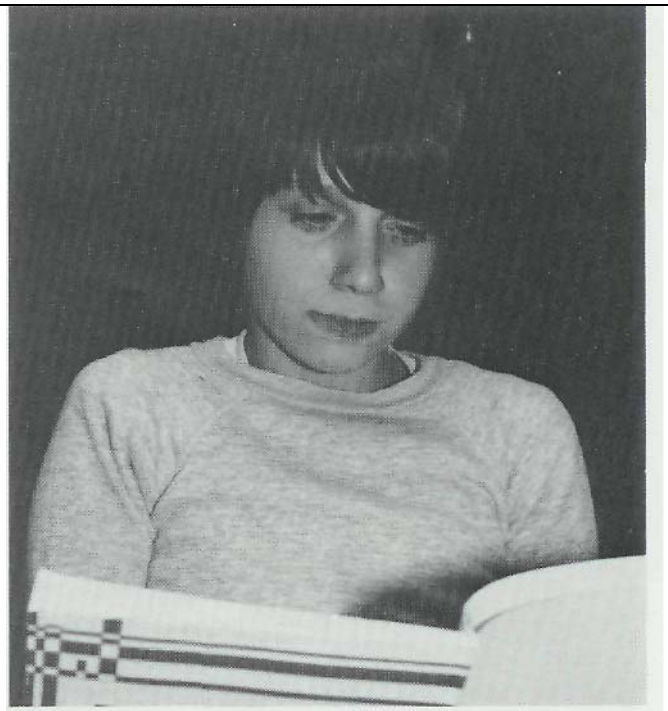


WHY JONATHAN CAN'T READ

by Orna Lenchner and Rivka Dori



Authors' Note: *In the field of language instruction the term "reading" has several connotations depending on one's theoretical orientation and instructional goals. Often, "decoding" of visual symbols into sounds is confused with "reading for comprehension". It is the authors' belief that reading in Hebrew, as well as in any other language, entails the ability to comprehend as well as to decode the written symbols, and that the acquisition of such reading skills should be seen as an integral part of the process of acquiring Hebrew as a language. However, we are aware that the instruction of Hebrew mechanical reading is a prevalent practice and isolated from instruction of the Hebrew language as a means of communication (Hammer, 1979). In this article we will not enter into the debate regarding the advisability of such practice, but take it for granted, and gear the content to the needs of teachers whose instructional emphasis is on teaching "decoding". Our major goal is to provide teachers a conceptual framework for understanding problems typically encountered by students learning to decode.*

This article will be presented in two separate issues. In this issue we will discuss characteristics of children we call "learning disabled" that are likely to interfere with their learning to decode Hebrew. In the coming issue we will systematically analyze the effects of some idiosyncrasies of the Hebrew alphabet on the process of decoding and present some recommendations for planning instruction.

Orna Lenchner is an Israeli doctoral student in Special Education at the University of California, Santa Barbara. Rivka Dori is a lecturer of Hebrew language at HUC-JIR and USC and co-director of Union Hebrew High School in Los Angeles.

the letters. However, the learning disabled often lack this flexibility to compensate and will be frustrated by the unfamiliar shapes.

g. Part-Whole Relationships: Difficulty perceiving part-whole relationships is considered to be one of the classical defining characteristics of a learning disability. It is closely related to problems we discussed in figure-ground discrimination, spatial relations and

closure and is most likely to affect a student's ability to accurately perceive the relationship between parts of a word and the entire word. This difficulty may lead

students to omit, add or change parts of a word, especially if they are already familiar with other words derived from the same or similar root.

2. AUDITORY PERCEPTION:

The decoding process involves the translation of a visual symbol into a sound. Auditory perception, therefore, has a major role in the process. At least four auditory skills are involved: Auditory Discrimination, Auditory Blending, Auditory Memory and Auditory Sequencing.

a. Auditory Discrimination: Many children have difficulty discriminating between pairs of voiced and voiceless phonemes articulated at the same point. For example: The stops "p" and "b" {"pey" and "bet"}, the labial fricatives "f" and "v" ("fey" and "vet") and the dental palatal stops "t" and "d" ("tet/tav" and "daled"). Since all these sounds exist in Hebrew as well, the child having difficulty distinguishing between them in English is also likely to have problems in their auditory discrimination in Hebrew.

b. Auditory Blending: This usually means the ability to auditorily blend consonant(s)—vowel combinations, e.g., "rn" + "a" = "ma". If a child cannot blend auditorily, then the ability to translate two visual signs into sounds and blend them will be hampered.

c. Auditory Memory: Auditory Memory is a skill that in isolation is not essential for decoding. It will more likely have an effect on learning to speak the



Why Jonathan Can't Read

PART TWO

by Orna Lenchner and Rivka Dori

Authors' Note: The Hebrew alphabet poses unique difficulties to the novice student learning to "decode" Hebrew, i.e., translate its visual symbols into sounds. Some of these problems can be attributed directly to the idiosyncrasies of the Hebrew alphabet. The Hebrew alphabet poses additional difficulty to children with perceptual deficits characteristic of "learning disabilities." In Part One of this article we discussed the ways in which such deficits could interfere with the process of learning to decode Hebrew. In this part we will focus on the effects Hebrew idiosyncrasies have on decoding skills, and conclude with practical suggestions for the prevention and remedy of such problems.

Orna Lenchner is an Israeli doctoral student in Special Education at the University of California, Santa Barbara. Rivka Don is a lecturer of Hebrew language at Hebrew Union College and USC and co-director of Union Hebrew High School.

II. IDIOSYNCRACIES OF THE HEBREW ALPHABET

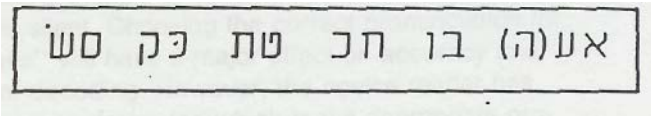
The second broad category of problems that can affect the acquisition of Hebrew decoding skills stems from idiosyncrasies that are particularly characteristic of the Hebrew alphabet. Some of these may compound the perceptual obstacles any reading system presents to the novice reader.

These idiosyncrasies fall into five broad categories (Lenchner, 1981), four of which fall into a convenient

Letters	Vowels
1	4
2	3

1. SAME SOUND—DIFFERENT LETTER

There are several sets of letters in Hebrew that have the same sound but are written differently. Thus, although there may be an almost perfect symbol-sound correspondence in Hebrew, (i.e., each symbol represents only one sound), the correspondence between sound and symbol is much less consistent (i.e., one sound may be represented by various symbols). These sets of letters are:



2. SAME LETTER—DIFFERENT SOUND

There are five sub-categories in this group;

- The "dagesh"—changes the sound of three letters in Hebrew: "vet", "chaf" and "fey".
- The "hey" and "yod" are sometimes pronounced (like an "h" or a "y" respectively) and at other times are mute.
- The "vav", "cholarn" and "shuruk": The letter ו can be either a consonant ("v") or a vowel ("cholarn" or "shuruk").
- The "shin" and "sin". The letter ש can represent the sound of either "sh" or "s" depending upon the placement of a dot above it.

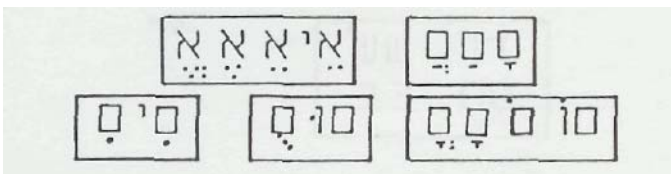
3. SAME VOWEL—DIFFERENT SOUND

Although Hebrew letters have a near perfect symbol-sound relationship, the vowels produce some exceptions:

- The "kamatz" symbol could represent either a "karnatz gadol" (similar to a "patach" sound) or a "kamatz katan" (similar to a "cholam" sound).
- A "patach" followed by a non-voweled "yod" often sounds different than it does when followed by any other consonant.
- The "sheva" is either vocal (pronounced like a short "e") or silent.

4. SAME SOUND—DIFFERENT VOWEL

The vowel system in Hebrew includes sets of different vowel symbols which are pronounced similarly:



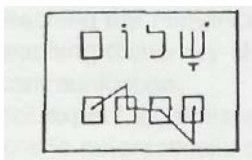
These sets roughly fall into two groups:

- Pairs of vowels that share no visual resemblance to each other, e.g., "shuruk" and "kubutz".
- Pairs of vowels that share visual characteristics, e.g., "patach" and "chataf-patach".

Pronunciations that are different from the above are due to differences in dialect. For example, "kamatz gadol" is pronounced like the "cholam" in Ashkenazi Hebrew. In traditional Hebrew "א" is pronounced much like a long "a", while the "א" is pronounced like a short "e". However, in modern spoken Hebrew this distinction is not always made.

5. ADDITIONAL IDIOSYNCRACIES OF THE HEBREW ALPHABET

In addition to the already lengthy list of idiosyncrasies, several outstanding characteristics should be kept in mind and brought to the attention of students. a. The Vowel Symbols: For the native speaker of Hebrew there is nothing at all unusual in the fact that the vowels consist of dots and lines usually placed underneath letters, rather than of actual letters as the a-e-i-o-u in English. However, for the foreign student it is quite an unusual characteristic. b. Right-Left Progression: Some educators believe that this poses a problem to novice students accustomed to a left-right progression. There is no data to support this supposition, and unless a student has a severe problem in directionality or laterally this unusual characteristic will probably lead to amusement rather than difficulty. What may, however, cause difficulty, is another unusual characteristic of the direction in which Hebrew decoding progresses. The eye movement is not necessarily constant from right to left, but can simultaneously also move up and down. For example:



- c. Final Letters: While Hebrew has no capital letters, five of its letters assume a different form when they appear at the end of a word. In print four of the five share a common characteristic: they have descenders.
- d. Unfamiliar Sounds: First, there are fewer vowel sounds in Hebrew than in English, and even those that exist in Hebrew only rarely have exact equivalents in English. For example, there is a "segol" sound in English (short "e"), but not really a "patach" or "cholam" sound. Second, there are consonant sounds that exist in Hebrew but not in English, and vice versa. For example, there is no "j" or "th" in Hebrew, and English does not have the equivalent to the consonant פ •
- e. Silent Letters: When the "aleph" and "ayin" are un-voweled they are treated as silent letters; when vowelized the sound of the vowel is pronounced.
- f. The "Sheva": The "sheva" is probably one of the most confusing vowels for the novice reader of Hebrew. It is a vowel that will always appear in combination with another vowel. Its pronunciation will vary depending on its position in the syllable. A "sheva" that begins a syllable is vocal, and one that closes a syllable is silent. Choosing the correct pronunciation for the "sheva" will have a major effect on accuracy and fluency of decoding. However, the novice reader has limited tools to determine which is the appropriate pronunciation.
- g. "Furtive Patach": When "chet" or "ayin" appear at the end of a word and are accompanied by a "patach", the "patach" will be pronounced as if it preceded the consonant.
- h. The "Inflected" Nature of Hebrew: In Hebrew, noun and verb forms are derived from root letters, so that common clusters of numerous words as in fact slightly changed forms of each other. (Feitelson, 1981).

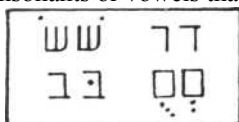
For example:

The novice reader may experience difficulty discriminating among them.

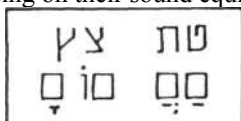
Thus, we have seen that although the alphabet is quite consistently phonetic, it can pose many problems to the novice reader and in particular to the one with specific learning difficulties. Awareness of the potential problems arising both from the characteristics of the alphabet itself and the characteristics of a learning disability should provide teachers guidelines for structuring their instruction so as to minimize the difficulty. In the following section several recommendations for planning instruction will be discussed.

III RECOMMENDATIONS FOR PLANNING INSTRUCTION

1. Introduce consonants or vowels that are visually similar but have different sounds separately, e.g.,



2. Introduce consonants or vowels that are visually different but have the same sound, either simultaneously or in relative proximity, focusing on their sound equivalence, e.g.,



3. When introducing a new consonant or vowel, use a word the student is familiar with and keep referring to that "model" word.
4. When teaching the vowels, focus attention on the form of the dot array and usual location of the dots.
5. Provide practice in reading different types of print.
6. In the initial introduction to the Hebrew alphabet, use large, clearly printed letters with minimal distractors on the page.
7. Present separately, letters that have similar sounds if you suspect the student has a deficit in auditory discrimination.
8. Provide practice in the various vowel and consonant combinations with extra practice for the combinations that are least familiar to English speakers, e.g., various "sheva" combinations, words with sounds that do not exist in English, etc.
9. Teach as much spoken Hebrew as possible as part of your reading instruction to establish a more meaningful association between sound and symbol. This will make reading a self-reinforcing task and, in addition, provide students who may have a deficit in visual processing an opportunity to rely on their auditory skill.
10. Note that teaching the order of the alphabet can be of practical value for:
 - (1) teaching the numerical value of the letters,
 - (2) teaching dictionary skills and
 - (3) communication.
 Do not expect students who can recite the alphabet by rote to automatically associate the letter name, with its symbol and/or its sound without explicit instruction.
11. If a student is failing to learn to read through the standard visual modality, then try to teach auditorily, and experiment with the tactile and kinesthetic. Such activities may include writing or tracing letters on a chalkboard, in sand, on big sheets of paper with a thick marker; touching letters (wood, plastic, rubber, etc.); using the body to create letter shapes; integrating the four senses by having the student trace over a written word while looking and saying it.
12. Provide practice in substituting consonants or vowels in nonsense words.
13. Provide practice in reading words derived from a common root.
14. When an idiosyncratic characteristic of the Hebrew alphabet is either extremely rare or difficult to explain and its full understanding is not essential for decoding, simply provide examples of the characteristic and practice in decoding words in which it is manifest. For example, when teaching the "furtive patach" and "kamatz katan" it is only necessary to provide practice in decoding words in which these two occur.
15. However, when an idiosyncrasy is frequent and a basic understanding of the grammatical rules that determine the pronunciation is essential for fluent and accurate reading, provide guidelines which are specifically applicable to the decoding process. Thus, the precise grammatical rules of the "sheva" might be explained as follows: The "sheva" has the sound of a short 'e' as in 'bed' at the beginning of a word and when it is the second of two "shevas" in the middle of a word. At all other times it should be treated as silent by the novice reader. (See also Lenchner, 1981).

This list of recommendations is not inclusive, though it does attempt to deal with the major sources of difficulty discussed earlier. It is important to maintain flexibility and attempt to match our remediation efforts to the particular needs of our students.

In summary, we have seen that despite its seeming ease, there are at least two major potential sources of difficulty in Hebrew decoding: the specific deficits associated with a learning disability, and the idiosyncratic characteristics of the Hebrew alphabet. Careful analysis of these sources of difficulty allowed us to recommend certain techniques that can facilitate and expedite the study of decoding. Though the major purpose of this article was to provide teachers a framework for dealing with learning disabled students, practically any student is likely to encounter similar problems, at least in the early stages of decoding. The difference, however, lies in the student's ability to compensate for an area of deficit and in the intensity and duration of the problem, and consequently in the quality and amount of investment needed to remediate the problem. Hopefully the analyses and guidelines discussed in this paper will provide teachers a useful framework for both diagnosing and remediating the difficulties encountered by all their students. ■

The authors would like to acknowledge their indebtedness to Dorothy Semmel and Robert Hetzron for their comments.

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