Typography in a Bilingual Siddur

By Simon Prais

Typography concerns both choice of font (or design of a new one), and use of the chosen font/s. This pertains to size, layout and formatting. Both 'choice' and 'use' each have two key factors requiring careful balance, style and legibility. In the case of a bilingual siddur both these aspects are of paramount importance. The very nature of a bilingual siddur indicates that its target audience are those for whom Hebrew is not their first language and so legibility of the Hebrew font and its layout is vital. Of comparable importance is design, style of the font and also the visual appearance of the layout.

It can be challenging to move forward from what we accept as traditional. However, with the objective of improving legibility and the ability to pray accurately from a siddur, the basis of such changes can be both historically and rationally justified. Comparison of early Hebrew lettering to that which we consider a traditional Hebrew font illustrates how technology and the secular world influenced the Hebrew fonts of the 18th century, resulting in a loss of legibility and heritage.

A siddur helps us to perform the mitzvah of prayer. Beautifying the mitzvah through good design is a mitzvah in itself, encouraging regular and accurate use. Unlike a novel or a newspaper, both of which would normally be read just once, a siddur is somewhat unique. The texts are repeated on a daily and weekly basis, and are poetic in content, which should be taken into account when considering the suitability of font and layout design.

In order to appreciate the complexities of the subject, it is necessary to first understand the origin of the written Hebrew letter and that of its subsequent printed form.

Background to the written and printed Hebrew letter

Comparison of the written Hebrew letter – both earliest examples and later developments – show contrasting differences to that which is popularly accepted as traditional *(figure 1-E).*

A) Dead Sea Scrolls (circa 1st c. BCE)

B) Beit She'arim Inscription (circa 3rd c. CE)

C) Aleppo Codex (10th c. CE)

ומח טעם פתח כבראשית

D) Early Hebrew type, printed in Reggio di Calabria (1475)

אבגדהוזחטיכךל
מםנןסעפףצץקרשת

E) Vilna Romm Style (19th c. CE)

אבגדהוזחטיכךל
מםנןסעפףצץקרשת

F) Frank Rühl, Rafael Frank, Germany (1908)

Figure 1

1-A An early example of the written Hebrew letter from the Dead Sea
Scrolls circa 1st century BCE.

1-B An early example of Hebrew inscribed in a coffin lid[1] at Beit She'arim
circa 3rd c. BCE

1-C The Aleppo Codex, written in the 10th century, the Masoretic period,
which saw attention to detail and accuracy of the written word.

1-D One of the earliest examples of printed Hebrew[2], printed in Reggio di
Calabria.

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[1] Ada Yardeni, *The Book of Hebrew Scripts*, Carta 1997.

[2] Rafael Frank, *German Printing Trade Archives, Vol 48 issue 11, (German),* 1911.

1-E A 'traditional' Hebrew font in the style used from 1825 by the Romm Family Press in Vilna. This example is from a current edition of the siddur 'Tefilat Kol Peh' published by Eshcol, Jerusalem.

1-F Frank Rühl typeface 1908, a key early step in the 20th century's reforms in Hebrew typography.

A factor contributing to the acceptance of this style *(figure 1-E)* as being 'traditional' was its use by the Romm family to print the Vilna Talmud from 1825, through to its continued use to date. Font designers of the 20th century set out to improve on the many flaws of this style; the first of note being Rafael Frank, who designed the Frank Rühl font in 1908 *(figure 1-F)*. In his essay printed in the German Printing Trade Archives (Vol 48 issue 11) of 1911, Frank describes the earliest Hebrew fonts (prior to influences resulting in the 'traditional' style) as follows:

> *This type – set without vowels [figure 1-D] – is acute-angled in shape and, even at this early date, the letters were rectangular at a ratio of 3:4, the shape I was to demand for the Frank-Rühl typeface [figure 1-F]. And these characters do not bear the slightest trace of the stark differentiation between horizontal thickness and vertical thinness that later became a feature of Hebrew type and has lasted until our day [figure 1-E].*

In comparison to earlier written Hebrew letter styles *(figures 1-A/C)*, there are four noticeable differences in the 'traditional' style:

- Contrast of vertical to horizontal strokes.
- Horizontal to vertical letter ratio.
- Angled to horizontal base strokes.
- Similarity of letters and recurring shapes within letters.

Contrast of vertical to horizontal strokes – the traditional Hebrew font exhibits the extreme of a style applied to Latin typefaces of the early 19th century; a style pioneered by the likes of John Baskerville (Birmingham, UK in 1757) and which reached extremes through Didot and Bodoni in the early 1800s. This resulted in an accentuation of the difference in the thickness of horizontal to vertical strokes. Parallels to the traditional Hebrew style are also drawn with that of the Gothic Blackletter which was popular in Germany through to the mid-20th century. Ittai Tamari writes[3]:

> *The letter cutters relied on handwritten manuscripts as models that were not always of an embellished 'square' and corrected script; this resulted in the printing of distortions and errors. The most obvious of these was the emphasis of the thick horizontal strokes, characteristically produced by a flexible quill but which could have been, more or less, regularised and minimized by the font cutter's*

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[3] Ittai Tamari, Chair for Jewish History and Culture, Department of History, Munich University, *'New Hebrew Letter Type', Tel Aviv University Exhibition Catalogue,* 1985.

> *tool. Gothic characteristics were thus fixated in a letter that in fact had nothing in common with the Gothic tradition.*

Unlike the Latin letter that benefits from a slightly heavier vertical stroke, it is the horizontal strokes of the Hebrew letter that were exaggerated in thickness. However, there are a number of fundamental problems in applying such a style to Hebrew typography.

Figure 2

Figure 2 compares a Latin letter '*M*' to the Hebrew letter '*Final Mem*'. They are both of identical outer dimensions, other than the Hebrew letter actually benefiting in height from the top of the letter rising above that of the Latin letter. However, even with the additional physical height of the Hebrew letter, the Latin letter appears to be taller. An optical illusion, but when applied to the design of a Latin font, the printed word benefits from looking taller, whereas the Hebrew letter style looks shorter[4].

A further aspect from applying extreme contrast differences to the Latin and Hebrew letters is that of legibility. If the thinner horizontal strokes of the Latin alphabet are totally removed, the letters still retain a level of individual recognition, whereas this is far less when the thinner vertical strokes are removed from the Hebrew alphabet. Every stroke of the Hebrew alphabet is required to avoid uncertainty of the letters. The importance of seeing the entire shape of each Hebrew letter compared to that of the Latin alphabet was researched by Joseph Shimron and David Navon at the University of Haifa[5]. The experiment highlighted that

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[4] Simon Prais, *Design Considerations affecting the simultaneous use of Latin and Hebrew Typography,* 1984. www.HebrewTypography.me.uk

[5] Joseph Shimron and David Navon*, The Distribution of Visual Information in the Vertical Dimension of Roman and Hebrew Letters, Visible Language Volume 14 Number 1.* 1980.

covering the top part of each letter in the Latin alphabet did not hinder reading speed as significantly as when applied to the Hebrew letter.

Incidentally, fonts with a slightly heaver vertical than horizontal stroke are used in Israel for signage. This results in the letters looking taller than if the traditional form of heavier horizontals were applied *(figure 3).*

Figure 3

Horizontal to vertical letter ratio – The square ratio of the traditional Hebrew letter uses more space than a narrower 3:4 ratio letter. Although more compact, a correctly designed letter can actually result in improved differentiation between similar letter pairs. For example, such as the overhang on a *Bet/Daled* to distinguish from a *Caf/Resh* comprising a larger proportion of the letter's width. A 3:4 ratio letter also results in more words to the line, thus saving space that can be applied to an increase in font size.

Angled to horizontal base strokes – A uniform horizontal base stroke, a characteristic of the traditional Hebrew typeface and a continued practice in many current day fonts, greatly reduces legibility. It is clearly an influence of the Latin letter sitting on a baseline and the format of metal typecasting machines.

As illustrated by the letter samples *(figures 1-A/C)*, and the traditional laws for writing a *Torah,* Hebrew letters hang down from a scored line and have a sloping baseline. However, the majority of Hebrew fonts currently in use today are designed to sit flat on a baseline; incorrectly, in my opinion.

The Hebrew letters have far less components than the Latin letters, and a uniform horizontal base line in a high proportion of the letters reduces the speed with which one can interpret them. Although a horizontal baseline would have been practical for the setting of Hebrew with vowels in metal type, photosetting technology from the 1960s and more recent computer setting can easily accommodate setting vowels under letters which have a sloping base.

Similarity of letters and recurring shapes within letters – The traditional Hebrew font style lacks accentuation of the differences in

comparable letter pairs; *Nun* to *Gimel*, *Bet* to *Caf*, *Heh* to *Het* and *Samech* to *Final Mem*.

Also of note is the letter *Lamed* in which, although not necessarily reducing legibility, but not following historic form, the prominence of its ascending stroke is reduced in the printed letter and the lower part of the letter accentuated. This trait is frequently exacerbated by bending of the top of the *Lamed* as shown in figure 1-E. The advantage of such a practice is that less space is required between lines of text without the *Lamed* clashing with the hanging strokes of final letters or vowelisation; however, it is not in keeping with the letter's original characteristics.

Koren – Tanakh font 1958; Book font 1978
– Koren Bilingual Siddur 2009

A) Aleppo Codex (10th c. CE)

B) Frank Rühl, Rafael Frank, Germany (1908)

C) Koren Tanakh, Eliahu Koren, Israel (1958)

D) Koren Book, Eliahu Koren, Israel (1978)

Figure 4

The original font, *Koren Tanakh (figure 4-C)*, was designed by Eliahu Koren in 1958 for printing the Koren Tanakh. This was the first Bible to be printed and published entirely by Jews in nearly 500 years[6]. Having studied graphics and stained glass in Germany, Koren arrived in Jerusalem in 1933. His early work included running the graphics department of the KKL (Jewish National Fund). He won a competition to design the emblem for the city of Jerusalem and his work (the Lion and Olive Branches) is used to this day. Koren originally embarked on the design of the *Koren Tanakh* font for printing a Tanakh to be published by the Hebrew University. However, after their decision to change the production process to use an existing font rather than proceed with the manufacture of the *Koren* font, the University's publication was found to be inaccurate and subsequently unsuccessful. This resulted in Koren publishing his own accurate Tanakh – the official Tanakh of Jerusalem and the Knesset.

Koren provides us with references to the inspiration, objectives and science behind the creation of his font[7].

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[6] Dr Leila Avrin, *Yedidei Ha'sefer No 6, Israel Bibliophiles (Hebrew/English),* 1986.
[7] Eliahu Koren, *The Idea and the Realisation (Hebrew),* 1991.

A) Printing was invented in the middle of the fifteenth century. The inventor, Johannes Gutenberg, printed the first Bible in non-Hebrew letters. This Bible is well known not only for being the first one but also because it is considered to be the most beautifully printed Bible. What letter did Gutenberg choose for his book? No doubt he looked among the written letters, searching for the most beautiful ones, in order to cut the letters for his printing similar to them. I followed the same path. Since I, like any other person, cannot decide by my own judgment which is the most beautiful Hebrew letter and the most correct one, I checked the first printed documents ever made. In this way I made the skeleton for the Hebrew alphabet. Every letter needed adaptation, since the easier it is for the eye to take in a letter, the quicker the brain is to understand it, exactly as the spoken word, when it is uttered with the right tone and strength, comes better through the ear to the brain.

B) Although I am not keen on using abbreviations in order to explain the Torah, I was happy when I found a nice explanation that would strengthen my approach to the work I was facing. In the book of Vayikra, Chapter 17, Verse 11, it is written: For the life is in the blood. I explain the word 'hadam' (the blood) thusly: 'he' - hidur (giving beauty); 'daled' - diuk (precision); and 'mem' - massoret (tradition). Those three characteristics - tradition, precision and beauty - became the basis of my work. They are the life-blood of a perfect work.

C) …Whilst reading (the font) they filmed the retina of the reader. The more the retina of the eye was closed it indicated that the eye was making more of an effort. Comparably, the more open the retina indicated reading was easy and comfortable… The final results were that the greater the difference between the letter shapes, the easier the eye interprets them.

The *Koren Tanakh* font was completed in 1958 after the initial matrices for casting the letters had been rejected by Koren for varying by one three-hundredth of a millimetre from his original drawings (the manufacturer's specified tolerance being up to two-hundredths of a mm). The letters were drawn 10x the size of the cast letters, which in turn were 50% larger than their final usage in the largest format of printed Tanakh (the size in a standard size Tanakh or Siddur being a further 50% smaller).

In addition to maintaining a reasonable difference in vertical to horizontal line weights, as introduced in the *Frank Rühl* typeface, and a similar 3:4 shape ratio, Koren's objectives are clearly achieved (figure 4-B/C).

A greater differential in letter shapes is evident through the use of angled horizontal strokes. The angled heads (rhomboid shapes) of the *Koren Tanakh* font accommodate the placement of the *Cholem* vowel and that of the *Shin/Sin* dot (figure 5). Unlike the *Lamed* letter style of *Frank Rühl* and *traditional* style fonts, the foot of the *Lamed* in *Koren* is tapered and greater prominence and height given to the ascending vertical stroke. In discussions with Eliahu Koren (1984) he was very particular that the upper stroke of the *Lamed* is prominent and not bent as had become customary in *traditional* fonts.

Figure 5

Remaining true to his objectives of tradition, precision and beauty, the *Koren* letter maintains the characteristics of the *traditional* Hebrew letter, whilst benefitting from the *beauty* of well-drafted and balanced forms with an unprecedented degree of *precision*. This is achieved not only in the unique shapes of the letters and combinations accommodating all vowels and ta'amim in a legible form, but also in the production to a precision within two-hundredths of a millimetre.

Figure 6 compares the letters *Final Mem* and *Samech* of the traditional *Vilna* (right) to that of *Frank Rühl* (centre) and *Koren* (left). The *Vilna Samech* and *Final Mem* are differentiated only by the angle of the lower right corner whilst the upper three-quarters of the letters and the central space remain almost identical. The difference is increased in *Frank Rühl* by the rounding of the lower part of the letter which is also echoed in the central space, but the upper half of the letters remain similar. Koren substantially changes the dynamics of the letters, altering both the external proportions and the internal space.

Although the external shape of the Koren *Final Mem* does not differ much from the other font styles, Koren introduces an important characteristic to the central space. The shape of the space tapers in slightly, like a hanging water droplet, whereas the other fonts exhibit the opposite effect. In this the *Koren* font is true to the original structure of the Hebrew letter, hanging from the line.
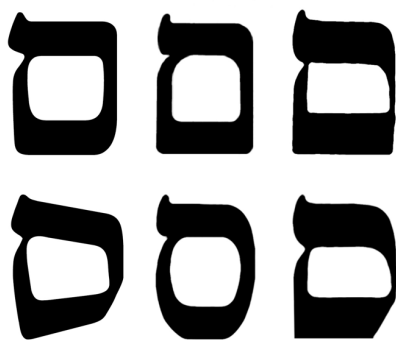

Figure 6

Having produced the *Koren Tanakh* font (for cast metal typesetting) in 1958, a number of other publications including a bilingual Hagadah (1965) were produced in this typeface. However, Koren ideally wanted to reserve use of this font exclusively for the Tanakh and he set about designing a variant of the typeface, *Koren Book* (figure 4-D), which would be used for

the Koren Siddur (Hebrew-only edition, first published 1982). This font was made available on the AM Verityper phototypesetting system in 1978 for Koren Publishing[8].

It must have been a struggle for Koren to create a second font – the *Koren Book* font – after achieving his ultimate goal with *Koren Tanakh*. However, in comparing the two fonts it is clear where his inspiration originated – the script of the Aleppo Codex. Koren explains[9] how after designing the *Koren Tanakh* font he had the opportunity to see the Aleppo Codex and was pleased that its script resembled his *Koren Tanakh* font. However, although he fails to say that he subsequently used it as a model for the *Koren Book* font, there are a number of key similarities in the character changes made to the *Tanakh* font to form this second font. Figure 4-A shows a small detail from the Aleppo Codex script. Of particular interest is the diamond/lozenge shape forming the tops of the letters *Gimmel* and *Zayin* and other letters in which this component appears, such as the left arm of the letter *Tet.* This provides one of the differentiating features of the Koren Book font. Also, the sloping bases of the *Tet* and *Tzadi*, and increased weight given to the top of the *Lamed.* These differences contribute to a further diversification from the repetitive forms of the *traditional* style, whilst still maintaining the general feel of the *traditional* letter.

The 1982 Siddur comprised of Biblical texts reproduced directly from the original Tanakh artwork of the cast metal *Koren Tanakh* font, combined with the remaining sections typeset in the *Koren Book* font through the AM Verityper photosetting system. These fonts had a different weight for the vowels associated with them. The *Tanakh* font has heavier vowels, requiring them to be set a further distance from the letters than those of the Siddur font. This distinguished the *Tanakh* typeface vowels from the lighter weight notes (ta'amim) required. As the addition of notes was not a requirement for the *Koren Book* typeface, the vowels could be lighter in weight and subsequently set closer to the letters. When the fonts were re-drawn for digital typesetting of the bilingual Siddur of 2009 a single set of vowels, based on the weight of the *Tanakh* font, was applied to both typefaces. This provides improved consistency across the two typefaces. A further modification is an alternative *Lamed,* not with a bent top which Koren would never even have considered, but the same shape *Lamed* with an almost indistinguishably shorter head. This is used in combinations where the top will otherwise collide with a note or descender from the line of text above. This can be identified in instances of consecutive letter *Lamed*, where only one is in the shorter form.

The continued resemblance to the *traditional* style by maintaining a significant difference in thickness between the vertical to horizontal strokes has its shortcomings. In small sizes, photographically reduced, the

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[8] Yossi Pinchas of Pal-Ron, Jerusalem (Verityper distributor). *Recollection of date based on the invention of Verityper photosetting in 1976 and first equipment becoming available in Israel by 1977, after which the bespoke Koren font will have been introduced.*

[9] Eliahu Koren, *The Idea and the Realisation (Hebrew),* 1991.

thin vertical strokes become too thin, thereby reducing legibility. This was something Koren was aware of and for textual notes within the Koren Siddur of 1982 the *Hadassah* font is used for references in the margin. *Hadassah* benefits from having a more uniform stroke thickness. The Koren Hagadah, printed earlier on in 1965, also used the *Hadassah* typeface for the small point size references.

The Koren fonts were specifically designed for religious purposes. The Koren Tanakh artwork was directly lifted to provide the biblical text components of the 1982 Siddur, on which the 2009 Siddur is based. It is said that during the preparation of the Tanakh, Koren would collect the artwork from his artist (many worked from home) every Friday afternoon, to ensure no work was done on Shabbat.

The Koren Siddur
Considerations of a Siddur layout are complex, even when just in Hebrew. In addition to distinguishing between instructions and text, there is the need to accommodate texts which are only included on special occasions. Ironically, such texts which are not said regularly, are frequently set in a smaller size with other techniques to separate them; subsequently the less familiar prayers are even less legible.

Adding a second language increases the challenge. Should the Hebrew be set on the right-hand pages with English to the left, or should it be the reverse? Or should both be on the same page and, if so, in which order? Also, should the text be aligned to the left or right? This provides numerous variations and most have been used for the publication of siddurim.

The purpose of a bilingual Siddur:
• To pray accurately in Hebrew.
• To provide guidance (rubrics).
• To offer easy access to the translation (when required).

To achieve this, many points including the following require consideration:
• Hebrew/English; left/right; single/double pages
• Referencing Hebrew to English
• Initial letters/words
• Alternative and occasional texts, words and paragraphs.

The most apparent variable when opening a bilingual Siddur is the juxtaposition of Hebrew to its translation. Traditionally, the most common format, as used in both the Authorised Daily Prayer Book[10] and the Artscroll Siddur[11], is to set the Hebrew on the right-hand leaf and its translation on the left-hand one. The logic is that Hebrew starts at the right and English at the left, so when looking at a double-page spread it is

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[10] United Synagogue, *The Authorised Daily Prayer book of the United Hebrew Congregations of the Commonwealth*, First published 1890.
[11] Mesorah Publications Ltd. *The Complete ArtScroll Siddur,* First published 1984.

natural to look to the right to find the start of the Hebrew. However, such a format does have its failings.

Figure 7 presents a double-page spread of *Ashrei* in the ArtScroll Siddur, this prayer having been selected as it is traditionally set line for line, resulting in an uneven space down the centre of the spread. Although traditionally only a few prayers are set line for line in such a format, the advantage of splitting prayers phrase for phrase, like poetry, is that it helps the reader correctly punctuate the prayers. A large proportion of our prayers are poetic and would benefit from such a layout. However, in addition to the central white space, there are further failings with such a layout. The purpose of translation is for reference when required; normally this would be from the start of a sentence. But in this layout the Hebrew starts at the far right of each page and its corresponding translation is at the furthest possible point, at the far left. Furthermore, when one's primary objective is praying (smoothly without unnecessary distractions) in Hebrew, it is not ideal that each line of Hebrew converges into the oncoming line of English.

The suggested logic for the instigation of this format is that when viewing a double-page spread, the logical place to position the Hebrew is on the right-hand page, as Hebrew is read from right to left. However, there is one key flaw in such a supposition. A Siddur is a book and one must take into account the mechanics of turning the pages of a book, not just viewing a double-page spread (as in a poster). An English book reads from left to right, and when printing on only one side of an English book's page, it is the right-hand side of each double-page spread which is printed, with the left-hand side remaining blank. This is because it is the right-hand side which the reader first sees when turning the pages of an English book. Subsequently, in a Hebrew book, reading from right to left, it is the left-hand side which one sees first, and thus would be printed. Applying such logic to a Siddur, which reads right to left with Hebrew the primary language, results in the left to right pages being reversed from the order used by the Authorised Daily Prayer Book and Artscroll. The Koren bilingual Siddur (figure 8) uses such a layout.

Figure 7

Figure 8

The Koren layout results in white space, due to the lines being split poetically, being in the outer margins, where the siddur is held. This ensures that text is not obscured and many prayers are set poetically, line for line, such as the *Amidah* (figure 8). The Hebrew and English start adjacent to each other for ease of reference, but the translation does not present as a distraction as the Hebrew is read away from the English. Similarly (as illustrated), the references to the texts are in the outer margins, separated by the white space, whereas in the traditional format (figure 7) references frequently merge with rubrics and/or the prayers. The Hebrew is also on the side of the page the reader first sees when turning over a leaf. Such a format was first used by Koren in 1965 in a bilingual Hagadah published by Koren and distributed through the Soncino Press, London and New York.

Figure 9 shows a double-page spread from this Hagadah. A key difference between the typography of this and other publications under the artistic guidance of Eliahu Koren, and that of the Koren 2009 bilingual Siddur under the typographic direction of Rafaël Freeman, is the approach to the English typography. Eliahu Koren was very much one for symmetry, balancing the Hebrew to the English line for line. As seen in figure 9, this frequently resulted in the English font size being significantly smaller than the Hebrew and excessive line-spacing within the English setting. Koren walked a fine line balancing aesthetics and legibility and on occasion, such as here, the quality of the English typography suffered. When discussing his approach to having the Hebrew set to the left of the English with Eliahu Koren in 1984, it was the aesthetic of reading out from the centre and alignment of Hebrew with its translation that Koren highlighted. He had not considered the additional advantage as to which side of the page the reader first sees when the page is turned. Koren had discussed applying this layout to other works with American publishers at the time but none were willing to risk setting the Hebrew to the left[12].

Figure 9

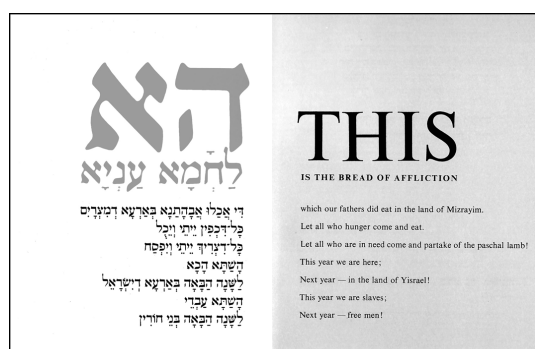The approach to the English typesetting by Freeman in the Koren Bilingual Siddur differs inasmuch as the English typography is not compromised for the sake of balancing it with the Hebrew (which is anyway unachievable). The English subsequently does not necessarily align with its Hebrew

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[12] Simon Prais, *Design Considerations affecting the simultaneous use of Latin and Hebrew Typography,* 1984.

counterpart, but can still easily be referenced through the initial Hebrew words repeated at the start of the English translation. Artscroll, and more recently the Authorised Daily Prayer Book, use a similar approach to matching texts to their translation by repeating the initial Hebrew words[13]. This is even more crucial for these publications as the distance is not either side of the margin but over the full expanse of the double-page spread.

The general approach to the typography of the Koren Bilingual Siddur was first applied to the Hebrew-only Koren Siddur of 1982. This includes the format for inclusion of sections said only on specific occasions. For this, Koren provided the most logical and practical solution. Until then, for a prayer that was only read once a month or once a year, the general approach by others had been to make it smaller as it is not crucial to everyday use and so does not justify taking up more than the minimum of space. This had resulted in the pre-2006 editions of the Authorised Daily Prayer Book having occasional texts, ones with which the reader would not be so familiar, set in a smaller font size but still over the full width of the page. The consequence of this is that the number of words per line is increased, but legibility is reduced, not just due to the text being smaller but because the number of words per line exceeds the maximum recommended for ease of reading. The outcome is detrimental; texts with which the reader is not familiar are made unnecessarily harder to read. Artscroll take the approach of reducing the font size but also highlighting such texts with a grey tone behind these sections. However, this technique makes the words even more difficult to read as the contrast is significantly reduced and the edges of letters merge with the dots of the grey tone. By comparison, Koren differentiated these occasional prayers by using a smaller font size, but rather than further reducing legibility by utilising the full line width and/or adding a grey tint, crucially the text is simply set indented. This provides a helpful visual indication that it is an occasional section and reduces the words-per-line count to aid legibility. The same approach, a most logical practical solution, is applied in the 2006 Authorised Daily Prayer Book.

The Koren Siddur provides further unique characteristics. The original 1982 Koren Siddur contained a physical link to the Koren Tanakh inasmuch as sections of the Siddur which originate from the Tanakh were reproduced from the artwork prepared for the Tanakh. Other than saving on the cost of resetting these sections for use in the Siddur, it provided a direct relationship to the Tanakh. The use of the *Koren Book* font for the other sections in the Siddur provided the benefit of a subtle visual differentiation.

There was, however, considerable editing still required as the Tanakh contained both vowels and notes (which had originally all been positioned by hand), whereas only vowels were required in the Siddur setting. All the notes had to be removed by hand, as did adjustments where a

[13] This technique can be seen in much earlier prayer books, such as in the Machzorim printed by M Phillips, London to the customs of German and Polish Jews, 1823.

qe'rie/ketiv needed to be replaced with just the qe'rie for the Siddur. This resulted in some inconsistencies in word spacing and vowels which had been previously positioned to accommodate a note to their side. There were also inconsistencies between the Tanakh and the Siddur typesetting of a *Kamatz Katan* and also of the furtive *Patach*, due to different approaches applied to the original Tanakh font setting and that of the *Koren Book* font. All these variations have now been standardised in the Koren Bilingual Siddur.

Koren designed unique layouts for some pages. This includes *Baruch She'amar* which highlights the extent to which Eliahu Koren was concerned with balancing legibility and aesthetics, even if it meant compromising his rigid principles. Figure 10 illustrates the *Baruch She'amar* page from the original 1982 edition. As the text does not originate from the Tanakh, it is, therefore, set in *Koren Book* font. However, the first four words have been set in *Koren Tanakh* font. This must have been a deliberate choice, as setting the words in the Tanakh font would have required considerable work in using the metal type, rather than the easier process of phototypesetting in *Koren Book* font. It was apparent from the first print run of the Koren Bilingual Siddur (figure 11) why Koren went to such trouble. The angled top of the letter *Resh* in the *Koren Siddur* font reduces the impact achieved from the square format of the *Koren Tanakh* font. Subsequent editions of the Bilingual Siddur now match Koren's original style for weekday *Shacharit* (but the same text in *Shabbat Shacharit* has not been corrected). Unfortunately, the expanded rubrics and inclusion of a commentary results in the lower block of the text in the bilingual edition having to flow on to the next page, thereby detracting from the original layout.
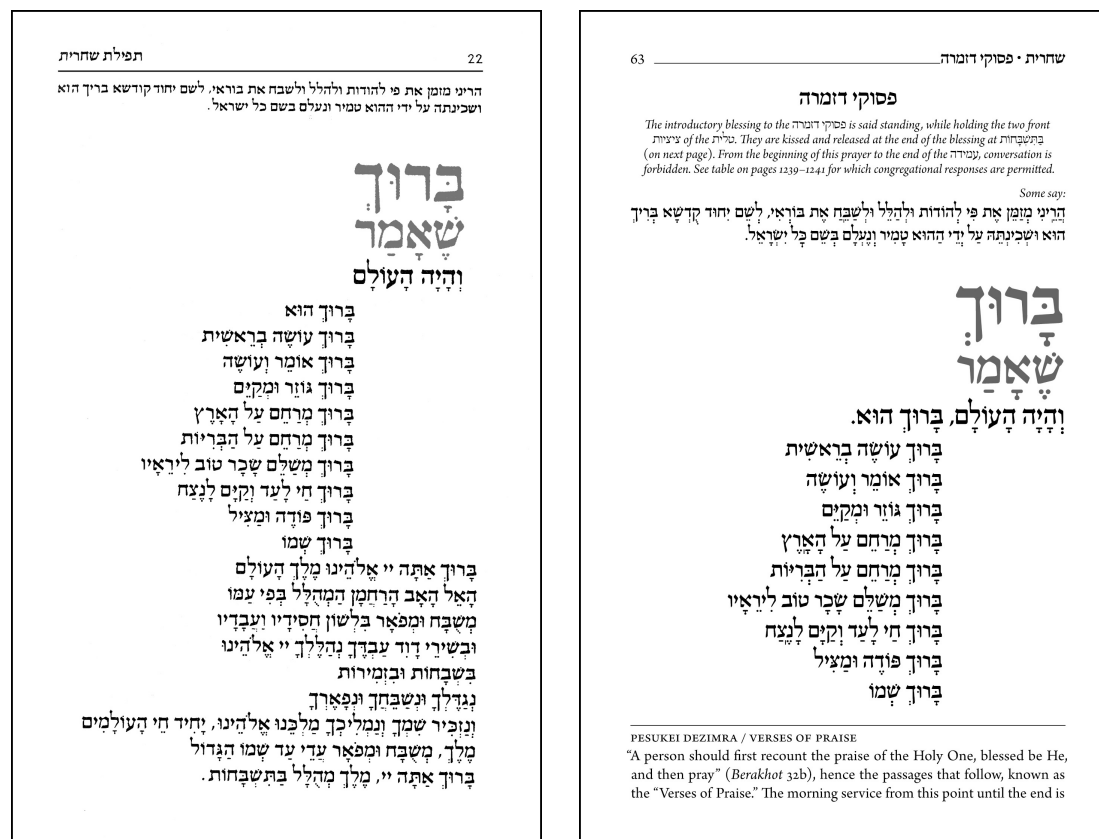
הריני מזמן את פי להודות ולהלל ולשבח את בוראי, לשם יחוד קודשא בריך הוא
ושכינתה על ידי ההוא טמיר ונעלם בשם כל ישראל.

בָּרוּךְ
שֶׁאָמַר
וְהָיָה הָעוֹלָם

בָּרוּךְ הוּא
בָּרוּךְ עוֹשֶׂה בְרֵאשִׁית
בָּרוּךְ אוֹמֵר וְעוֹשֶׂה
בָּרוּךְ גּוֹזֵר וּמְקַיֵּם
בָּרוּךְ מְרַחֵם עַל הָאָרֶץ
בָּרוּךְ מְרַחֵם עַל הַבְּרִיּוֹת
בָּרוּךְ מְשַׁלֵּם שָׂכָר טוֹב לִירֵאָיו
בָּרוּךְ חַי לָעַד וְקַיָּם לָנֶצַח
בָּרוּךְ פּוֹדֶה וּמַצִּיל
בָּרוּךְ שְׁמוֹ
בָּרוּךְ אַתָּה יי אֱלֹהֵינוּ מֶלֶךְ הָעוֹלָם
הָאֵל הָאָב הָרַחֲמָן הַמְהֻלָּל בְּפִי עַמּוֹ
מְשֻׁבָּח וּמְפֹאָר בִּלְשׁוֹן חֲסִידָיו וַעֲבָדָיו
וּבְשִׁירֵי דָוִד עַבְדֶּךָ נְהַלֶּלְךָ יי אֱלֹהֵינוּ
בִּשְׁבָחוֹת וּבִזְמִירוֹת
נְגַדֶּלְךָ וּנְשַׁבֵּחֲךָ וּנְפָאֶרְךָ
וְנַזְכִּיר שִׁמְךָ וְנַמְלִיכְךָ מַלְכֵּנוּ אֱלֹהֵינוּ, יָחִיד חֵי הָעוֹלָמִים
מֶלֶךְ, מְשֻׁבָּח וּמְפֹאָר עֲדֵי עַד שְׁמוֹ הַגָּדוֹל
בָּרוּךְ אַתָּה יי, מֶלֶךְ מְהֻלָּל בַּתִּשְׁבָּחוֹת.

Figure 10

פסוקי דזמרה

The introductory blessing to the פסוקי דזמרה *is said standing, while holding the two front* ציציות *of the* טלית. *They are kissed and released at the end of the blessing at* בתשבחות *(on next page). From the beginning of this prayer to the end of the* עמידה, *conversation is forbidden. See table on pages 1239–1241 for which congregational responses are permitted.*

Some say:

הֲרֵינִי מְזַמֵּן אֶת פִּי לְהוֹדוֹת וּלְהַלֵּל וּלְשַׁבֵּחַ אֶת בּוֹרְאִי, לְשֵׁם יִחוּד קֻדְשָׁא בְּרִיךְ
הוּא וּשְׁכִינְתֵּהּ עַל יְדֵי הַהוּא טָמִיר וְנֶעְלָם בְּשֵׁם כָּל יִשְׂרָאֵל.

בָּרוּךְ
שֶׁאָמַר
וְהָיָה הָעוֹלָם, בָּרוּךְ הוּא.

בָּרוּךְ עוֹשֶׂה בְרֵאשִׁית
בָּרוּךְ אוֹמֵר וְעוֹשֶׂה
בָּרוּךְ גּוֹזֵר וּמְקַיֵּם
בָּרוּךְ מְרַחֵם עַל הָאָרֶץ
בָּרוּךְ מְרַחֵם עַל הַבְּרִיּוֹת
בָּרוּךְ מְשַׁלֵּם שָׂכָר טוֹב לִירֵאָיו
בָּרוּךְ חַי לָעַד וְקַיָּם לָנֶצַח
בָּרוּךְ פּוֹדֶה וּמַצִּיל
בָּרוּךְ שְׁמוֹ

PESUKEI DEZIMRA / VERSES OF PRAISE
"A person should first recount the praise of the Holy One, blessed be He,
and then pray" (*Berakhot* 32b), hence the passages that follow, known as
the "Verses of Praise." The morning service from this point until the end is

Figure 11

The Koren approach to layout achieves optimum levels of legibility and readability, whilst also being innovative and aesthetically surpassing other siddurim. Its combined usage of the *Koren Tanakh* and *Koren Book* fonts serves as an intrinsic reminder of prayers originating from the Tanakh. The font design alludes to the influence of the traditional style whilst optimised for maximum legibility and beauty, derived from sacred historic references.