

# **David Hebrew**

**The first multi-style Hebrew typeface family  
by Ismar David**

Shani Avni

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# **David Hebrew**

**The first multi-style Hebrew typeface family  
by Ismar David**

**Shani Avni**

Dissertation submitted in partial fulfilment of the requirements for the Master of Arts in Typeface Design, Department of Typography and Graphic Communication, University of Reading, 2016.





## **Abstract**

Ismar David initiated the design of his comprehensive Hebrew typeface family in Jerusalem, in the 1930s. It is considered to be the first Hebrew multi-style family and consists of nine variations that show many innovative features that were never seen in earlier designs.

Starting with a historical overview of the typographic environment in the state of Israel around the time it was declared in 1948, this dissertation looks into the means of design and production of printed matter needed for the construction of a new nation. It then introduces David's life story in order to provide the background and context for his creation. Following the circumstances that led to the typeface design and production, this dissertation examines the typeface design itself and studies the issues David has written about such as the historic references and the production technology.

Using mostly material from David's archives, this study conducts a visual analysis of all members of the David Hebrew typeface family. The visual analysis provides an understanding of the relationship between the styles and weights of the family and isolates the factors that show the systematic thinking Ismar David applied to his design. By doing this, the dissertation looks to inform Hebrew typeface designers of David's approach and work process, in hope of contributing to future Hebrew type design challenges.



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Fig. 1 – The David Hebrew typeface family. The original ink drawing ca. 1953 as printed in the book *The work of Ismar David* (Brandshaft, 2005. Scale 45% ).

## 1 Introduction

In 1930s Jerusalem, Ismar David conceived the David Hebrew typeface as a family of nine styles. It was released two decades after and it is considered to be the first Hebrew multi-style family. The typeface carries innovative features not seen in earlier designs such as instrokes (called tags) for serifs, an organic secondary cursive style and a monolinear style (Fig. 1).<sup>1</sup>

The David Hebrew typeface design is ground-breaking when considering the environment in which it was created. Despite the political and social turmoil and the economic instability David succeeded in offering typographic richness for the limited Hebrew script. Since the Hebrew language and script suffered centuries of stagnation due to being confined to religious use, they only developed those typographic attributes that were necessary to present a particular range of texts. Therefore, Hebrew is lacking the typographic tools that would have evolved and developed from an ongoing secular use. With such shortage of resources and because Hebrew was now being promoted as a national rather than a religious language, a Hebrew type designer in the mid twentieth century would be challenged with many design decisions to be made independently.

The available information on Ismar David mostly tells his life story and shows his exceptional and vast designs at their final stage.<sup>2</sup> It appears David never elaborated in writing about his type design process, however, some understanding of his views could be found within documentation of correspondence, sketches and print proofs, kept in the Cary Graphic Art Collection in the Rochester Institute of Technology (RIT) in New York<sup>3</sup> as well as in the archive of Dr Spitzer in Israel. Through these somewhat limited resources this dissertation aims to shed more light on Ismar David's type design process and achievements.

The David Hebrew typeface gained great popularity when it was first released and was widely used in Israel for decades after. Unfortunately, over the years its popularity declined and its innovative features never became conventional in Hebrew typography. This dissertation tells the story of the prolific and insightful designer Ismar David and his outstanding and somewhat forgotten creation. It aims to gain a better understanding of his work process and its innovative result in the hope of benefiting future Hebrew type related endeavours.

1 Stern, Adi. (2015–16) *The design of the Hebrew letter in the first decade of the state of Israel* [Heb]. Wardi, Ada (ed). *The Graphic Design of Moshe Spitzer, Franzisca Baruch, and Henri Friedlaender*. Jerusalem: The Israel Museum. p. 47.

2 Shapiro, Ellen. (2006) *The Work of Ismar David*. Print magazine. January–February. p. 104.

3 Tolado, Sivan. (2003) *Letters from Ismar David's archive* [Heb]. [http://www.tau.ac.il/~stoledo/fonts/articles\\_david.html](http://www.tau.ac.il/~stoledo/fonts/articles_david.html), accessed July 2016.



## 2 Typesetting and printing in a struggling new nation

This chapter provides the background and paints the scene in which Ismar David created his designs. It briefly covers historical events and aspects that influenced Hebrew type design and production.

### 2.1 Israel's historical and political background

Palestine was part of the Ottoman empire between the sixteenth and the nineteenth centuries. During that time the province had a large Arab population. In 1922, Britain administered Palestine under the League of Nations trusteeship: the intergovernmental organisation founded in 1920 as a result of the Paris Peace Conference that ended the First World War. It was the first international organisation whose mission was to maintain world peace.<sup>4</sup> Around that time, the Jewish nationalist Zionist movement that was active in Europe, promoted emigration to Palestine with the purpose of founding a Jewish homeland there. As the number of Jewish immigrants increased, conflicts began to develop with the Arab inhabitants.

On May 14 1948, the British Mandate over Palestine expired and the Jewish People's Council declared the establishment of the state of Israel. Less than a day later, the armies of Egypt, Jordan, Syria, Lebanon and Iraq invaded the country. What became known as Israel's War of Independence lasted about fifteen months and claimed nearly one percent of the Jewish population. Although Israel won and even expanded its borders, the war took a great toll on the new settlers, who suffered from poor living conditions.

The agenda of in-gathering of the exiles affirmed the right of every Jew to come to the country and upon entry to acquire citizenship. In the first four months of independence many newcomers, mainly Holocaust survivors, reached Israel's shores.

By the end of 1951, the Jewish population doubled itself.<sup>5</sup> At that time the Hebrew reading public already had the habit of reading and purchasing books, newspapers and periodicals. The limited number of publishers and presses that were active mostly depended on a number of wealthy patrons (Fig. 2).<sup>6</sup>

4 Christian, Tomuschat.  
(1995) *The United Nations at age fifty: a legal perspective*.  
Martinus Nijhoff Publishers.  
p. 77.

5 Bugh, Glenn Richard.  
(2016) *Palestine*. Encyclopedia  
Britannica. <https://www.britannica.com/place/Palestine>, accessed July 2016.

6 Schocken, Gershom.  
(1946) *Printing and publishing*.  
Hobman J.B. (ed) *Palestine's economic future: a review of progress and prospects, with a message from Field Marshal Smuts*.  
London: Percy Lund Humphries. p. 244.



Fig. 3 – David's earliest friend in Jerusalem was Charlotte Stern, a fellow German that migrated several years before him. She owned Charlotte gifts Shop on Storrs Street, today's Koresh Street. Left image: French-fold Hebrew and English brochure for the shop designed by David. n.d. (Brandshaft, 2005). Right image: the shop sign in 2011 (Google maps streetview, 2016).



Fig. 4 – Examples of the Hebrew texts produced by the Jewish Enlightenment movement in Europe. Left image: the first section of the *Rhetoric and moral puzzles* by Isaac Satanow. Printed in Berlin 1775, unknown publisher. Right image: *The natural history of species in Ha-Me'asef* by Barukh Lindau. Published by the Orientalische Buchdruckerei in Königsberg, Berlin 1788 (Oxford centre for Hebrew and Jewish studies, 2016).



### 2.1.1 The Jewish German immigrants and their contribution to the emerging state of Israel

Ismar David came to Palestine in the midst of the fifth wave, *Aliyah* in Hebrew, of approximately 300,000 Jewish immigrants that took place between 1929 and 1939. About 55,000 immigrants came from Germany, most of them members of the upper middle class, who left developing modern cities. They were deeply engaged with their former culture and perceived themselves as Germans even though their own country denounced them. They spoke mostly German and some Ashkenazi Hebrew<sup>7</sup> and developed new urban cities in Palestine. They pursued a European lifestyle, which was very different to the one local Jews conducted in Palestine at the time and were not always well accepted by them.

The German immigrants made significant contributions to the fields of medicine, law, engineering and architecture, as well as classical music and journalism. They arrived with personal wealth and technical knowledge, invested it in local agriculture and industry and placed great emphasis on punctuality and integrity in their work. Another field in which they made their mark was design. They introduced a visual aesthetic that did not exist before in packaging of agricultural products, window shops and signage (Fig. 3).<sup>8</sup>

### 2.1.2 The revival of the Hebrew language

The revival of the Hebrew language is accurately described by researcher Jack Fellman as the transition into common, spoken, everyday use of a hitherto religious written language as a national and cultural symbol of the Jewish people in Israel.

Hebrew was the language of the Israelite and Judean people for over thirteen hundred years when around 200 BCE, it died as a spoken language and was replaced by Aramaic and Greek, the two international languages of the time. Since then Hebrew had been restricted to religious practice until its reintroduction as a spoken language in Palestine in the 1880s.<sup>9</sup>

The Jewish Enlightenment, the *Haskala*<sup>10</sup>, was a late eighteenth and nineteenth century intellectual movement, that spread among the Jews of central and eastern Europe. It aimed to acquaint Jews with the Hebrew language and with secular education and culture as supplements to traditional religious studies. Although inspired by the European Enlightenment movement, its development was distinctly Jewish. Over time a wide range of new Hebrew texts was produced in Europe as well as in Palestine, from biblical stories to original literature, translations of European classic and modern literature, as well as newspapers and periodicals (Fig. 4).<sup>11</sup>

A driving spirit of this revival process was Eliezer Ben-Yehuda (1858–1922). He emigrated to Jerusalem from Lithuania in 1881. Ben-Yehuda was a lexicographer of Hebrew and a newspaper editor. He actively promoted education in the Hebrew language and taught in schools around Jerusalem. His extensive efforts and contributions bore fruit and by 1922 Hebrew was Palestine's official language along with English and Arabic.<sup>12</sup>

7 Ashkenaz is the old Hebrew word for Germany.

8 Naor, Mordecha, Giladi, Dan. (1990) *Erez Israel in the 20th century. From Yishuv to statehood, 1900-1950* [Heb]. Ministry of defence, Israel. pp. 230–234.

9 Fellman, Jack. (1973) *Contributions to the sociology of language [csl]: the revival of classical tongue: Eliezer Ben Yehuda and the modern Hebrew language*. De Gruyter Mouton, The Hague. p. 11.

10 *Haskala* is the Hebrew word for education.

11 Encyclopedia Britannica. (2016) *Haskala, Judaic movement*. <https://www.britannica.com/topic/Haskala>, accessed July 2016.

12 Feiner, Shmuel. (2016) *The revival of the Hebrew language*. [Heb] <http://www.safa-ivrit.org/history/renaissance.php>, accessed July 2016.



Fig. 5 – *Ha-Levanon* newspaper printed in Jerusalem by Bril-Hacohen-Salomon in 1863. The publication was shut down by the Ottoman authority a short time after it was established (Olizky, 1973).



Fig. 6 – *Doar Hayom* newspaper edited by Itamar Ben-Avi. Printed on the first Linotype machine in Palestine, in Hasolel press in Jerusalem 1927. Ben-Avi introduced the large headlines and bold typefaces (The Seventh Eye, 2013).

## 2.2 The development of printing in Jerusalem

The printing industry in Jerusalem suffered continuous turmoil. Its development was frequently interrupted by the authorities, conflicts with the Arab inhabitants and even internal labour disputes between opposing Jewish workers unions.

Israel Bak (1797–1874) was an accomplished Ukrainian punchcutter and printer who migrated to Palestine in 1830. A decade after his arrival, he established the first press in Jerusalem. At that time the city was just becoming a centre for printing. Thirty years later, it had seven working presses, producing newspapers and ephemera on a daily basis (Fig. 5).

In 1914, the Ottoman empire that controlled Palestine joined the First World War. Subsequently, the metal type printing industry, which enjoyed decades of relative prosperity, suffered immensely from deteriorating conditions. The authorities forbade printing of Hebrew and all Zionist literature was banned. In addition, the Ottoman regime confiscated Jewish presses and ordered to melt most of the Hebrew metal types that existed at the time. Three years later, the British occupation of Jerusalem allowed an awakening in the field of printing. Albeit limiting conditions and shortage of paper and ink, newspapers were printed in Hebrew, Arabic and English, under some British military censorship.

After the First World War ended, a Linotype machine was brought to Jerusalem. It was purchased by Itamar Ben-Avi (1882–1943). He was Eliezer Ben-Yehuda's eldest son and the first native speaker of Hebrew. Ben-Avi was a journalist and a Zionist activist. He founded and edited newspapers in Hebrew and introduced a modern layout with large headlines and bold typefaces, influenced by the design of popular European and American journals of that time (Fig. 6). As Arab attacks on the Jews increased in Jerusalem, presses moved to Tel Aviv which then became the new centre of printing and journalism.

Around that time most printers advanced to typesetting machinery and entered an automation process in order to meet with the growing printing demand in the country. This process gained momentum only after the Second World War and by 1952 Israel had thirty eight Linotype machines, and twenty four Intertype machines.<sup>13</sup>

## 2.3 Growing demand for Hebrew typefaces

A brief examination of the Hebrew written script and its transition into movable type is needed in order to provide a more profound understanding of the shortage of Hebrew printing types experienced in Israel's early days as a state.

### 2.3.1 The Hebrew script

The modern Hebrew letter developed from the Aramaic or Assyrian alphabet around 560 BCE.<sup>14</sup> Over time the script evolved as a handwritten cursive, with a tendency of connecting letters and creating word images, rather than forming letters that stand on their own.

<sup>13</sup> Olitzky, Josef. (1973) *The Art of printing, four centuries of printing in Eretz Israel* [Heb]. Safed: museum of printing art, American Israeli paper mill.

<sup>14</sup> Beletsky, Misha. (2002) *Zvi Narkiss and Hebrew type design*. John D. Berry (ed). *Language. Culture. Type: international design in the age of Unicode*. ATypI and Graphis, pp. 91–105.

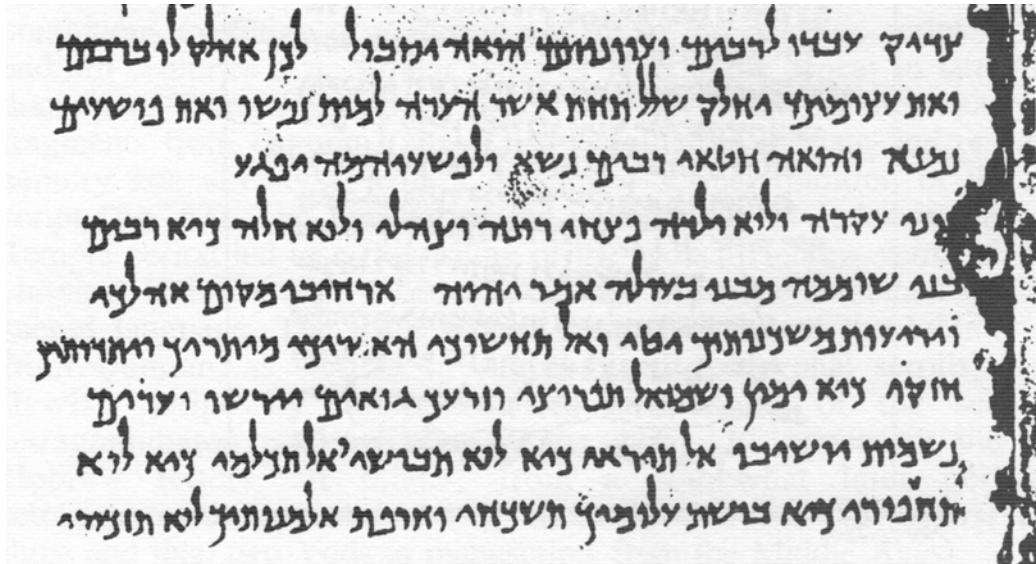


Fig. 7 – A detail of *The great Isaiah scroll*, late second or early first century BCE, Jerusalem, Shrine of the Book (Yardeni, 1997).

על חרוד את יהוה  
אל ישראל ביה  
תשובו מאחריי  
ויסת עוד לחניהו  
במדבר ושהתם  
לכל העם הזה  
ויקשו אליי  
ויאמרו צדקת צ  
יצאו גבנה למיקח  
למיקח דערים  
לשפנו אפנהו  
בחלץ ה שים לפני

Fig. 8 – Ashkenazi script written with a quill pen, creating a high contrast between the thick horizontal strokes and the thin vertical strokes (Yardeni, 1997).

עשרים אקף ושערים כרים  
עשרים אלה ויק בתים עשרים  
אלה ושמן בתים עשרים אלה  
ויאמר חורס מלך צר בכתב י  
וישלח אל שלמה באהבת חוה  
את עמו נתן עליוס מלך ויאמר  
חורס כרד יהוה אלהי ישראל  
אשר עשה את השמים ואת  
הארץ אשר נתן לחיד המלך  
בן חכם יורע שכל ובניה אשר  
בנה בית ליהוה ובית למלכותו  
ועתה שלחת איש חכם יורע  
בנה לחורס אבי בן אישה מקנות  
רן ואבז איש צדי יורע לעשות  
בורב ובכסה בנה שות בכרז  
באבנים ובעצים בארומן בתלת

Fig. 9 – Sephardi script written with a reed pen creating a lower contrast between the thick horizontal strokes and the thin vertical strokes when compared with the Ashkenazi script (Yardeni, 1997).



Fig. 10 – The lack of letter differentiation in a fifteenth century typeface based on the Ashkenazi letterforms in Italy, *Arba'ah Turim*, Piove di Sacco, 1475 (Yardeni, 1997, rearranged by the author).

Jewish tradition perceived the Hebrew alphabet as sacred.

The letterforms and the order in which they appear were considered to be divine and carry a complex religious meaning.<sup>15</sup> Since the second century BCE and for centuries to come, the Hebrew language was confined to religious use. Only qualified scribes were permitted to write manuscripts under strict rules. Their main concern was to preserve the letterform appearance, even at the expense of the ease and speed in which they could be read. In formal religious texts, no significant adjustments nor refinements were made to the structure of the letters, and their shapes were fixed. The script did not undergo the process of distillation, which can be detected in other scripts of lapidary traditions and mundane use (Fig. 7).<sup>16</sup>

Over time three Hebrew writing styles evolved: the formal book style called the square script, *Ktiva Merubaa*, used for writing traditional text; the cursive style, used for everyday writing and the Rabbinic, *Rashi*, a formal cursive style used mostly for religious commentaries.

In the middle ages, the Jewish communities in Europe were scattered among other nations and scribes were influenced by their surroundings. Around those times other Hebrew calligraphic styles developed, manifesting a more representative and decorative approach to the written traditional texts. The scribes looked to better the appearance of religious manuscripts while avoiding forbidden changes to the sacred letterforms. The two main interpretations of these styles were the Sephardi letter and the Ashkenazi letter.

The Ashkenazi style developed between the twelve and fifteen century, first in Germany and the north of France and later in eastern Europe. It was written with a quill pen that created interrupted strokes. The letters had a very high contrast between the thick horizontal strokes and the thin vertical strokes. This decorative style was influenced by the Latin Gothic letter that was popular at the time (Fig. 8).

During the same time, the Sephardi style was commonly used in the Iberian Peninsula. Since it was written with a reed pen that does not allow for very thin strokes it had lower contrast between the thick and thin strokes (Fig. 9).<sup>17</sup>

### 2.3.2 From written form to movable type

Both the Sephardi and the Ashkenazi formal book styles served as the basis for early Hebrew printing types. However, having no clear model, early punchcutters resorted to copying shapes from existing manuscripts of poor readability. The shift from calligraphic manuscripts into movable type retained the issues that impaired the reading process, such as lack of letter differentiation (Fig. 10), high contrast between thick and thin strokes and a dark heavy overall texture of the page.<sup>18</sup>

With the Gutenberg printing press gaining popularity in Europe, Hebrew presses were founded in cities where an active Jewish community enjoyed tolerance from the authorities. The first Hebrew types were based on the Ashkenazi style. However, due to its high contrast they achieved less than satisfying results and turned to the Sephardi style as an additional reference.

<sup>15</sup> Ben-Sasson, Yonah. (1981) Foreword. Spitzer, Moshe. (ed) *A letter is forever* [Heb]. Jerusalem: Israel ministry of education and culture: Achva press, Jerusalem. pp. 6–7.

<sup>16</sup> Tamari, Ittai. (1991) *Decipherability, legibility and readability of modern Hebrew typefaces*. Robert A. Morris, Jacques André, (ed). *Raster imaging and digital typography II*. Cambridge University Press, p. 134.

<sup>17</sup> Stern (2015–16) p. 31.

<sup>18</sup> Spitzer (1981) pp. 38–39.



In fifteenth century Europe, the Jewish people suffered persecution and were often forced to flee and relocate their presses. That prevented the continuous natural development that is needed for the refinement of type. With the Jewish punchcutters facing these social and political obstacles, it was the non-Jewish punchcutters who made significant contributions to the improvement of the Hebrew type.

During the mid fifteenth century and until the mid sixteenth century, some notable examples of Hebrew type created new standards for the letterform as well as for typesetting. The Italian Soncino family, the Venetian Daniel Bomberg, the French Guillaume Le Bé and the Dutch Christoffel van Dijck, all made it a priority to use credible and faultless manuscripts as references for their types. The book types they produced were of high authentic and aesthetic quality and became canonical for a long period of time (Figs. 11–14).

Higher contrast between strokes was becoming gradually popular in Latin type and by the nineteenth century it was seen in Hebrew type as well. The thin verticals connecting heavy horizontals had a destructive affect on the Hebrew type. It damaged the differentiation between the letters, and the rigid modern types of that time suffered from extremely low readability (Figs. 15a–b).<sup>19</sup>

Fig. 15a – Roedelheim typeface in printed *Mahzor* (A Jewish prayer book) Heidenheim press, Roedelheim, 1832. The Hebrew letters Daled and Reish enlarged by the author to show the lack of differentiation (Yardeni, 1997).

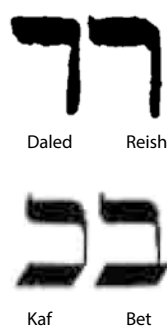


Fig. 15b – The Meruba typeface, Berthold type foundry, Berlin. The Hebrew letters Bet and Kaf enlarged by the author to show the lack of differentiation (Friedlaender, 1981).



### 2.3.3 The pioneers of Hebrew type

Around 1910, the Leipzig type foundry C.F. Rühl released the Frank-Rühl typeface. Carrying features of both the Ashkenazi and Sephardi styles, this new typeface provided a much needed improved alternative for existing types. Albeit its decorative Art Nouveau atmosphere and a dark texture on the page, the reduction in the contrast between strokes enhanced letter differentiation and made Hebrew texts more comfortable to read. It became extremely popular at the time of its release and it is still widely used in current days as a book and newspaper typeface in Israel (Fig. 16).

עצירתה הפתאומית של המכונה באמצע מהלכה מקורה בליקוי מיכני או בפעולה בלתי נכונה של הסדר. רובם של המעצורים

Fig. 16 – Frank-Rühl typeface (Yardeni, 1997).

The rise of the Zionist movement in Europe, the revival of the Hebrew language and the progress towards the declaration of Israel as a state, all led to a growing production of printed matter in the Hebrew Language. The available Hebrew typefaces were still extremely limited and did not cater to the needs of typographers at the time. Moreover, they represented the religious diaspora Jews and stood in conflict with the new spirit of a new generation building its new homeland. The immigrants were trying to shake off their old image and were writing a contemporary narrative for themselves as secular people. They sought to portray that image in every aspect of their lives, including in the design of typefaces.<sup>20</sup>

<sup>19</sup> Beletsky (2002) p. 95.

<sup>20</sup> Stern (2015–16) p. 35.

וַיֹּאמֶר אֱלֹהִים יִקְוּ הַבָּיִת מִתַּחַת הַשָּׁמַיִם אֶל־מָקוֹם אֶחָד  
וְתִרְאֶה הַיִּבְשָׁה וַיְהִי־כֵן: וַיִּקְרָא אֱלֹהִים וַיִּבְשָׁה אֶרֶץ וּלְמִקְוֵה  
הַבָּיִת קָרָא יָמַיִם וַיִּרְא אֱלֹהִים כִּי־טוֹב: וַיֹּאמֶר אֱלֹהִים תִּדְשָׂא

עצירתה הפתאומית של המכונה באמצע מהלכה, מקורה בליקוי  
מיכני או בפעולה בלתי נכונה של הסדר. רובם של המעצורים  
המובאים ברשימה זו אינם קורים אצל סדר מנוסה; ידיעתו את

עצירתה הפתאומית של המכונה באמצע מהלכה, מקורה בליקוי  
מיכני או בפעולה בלתי נכונה של הסדר. רובם של המעצורים  
המובאים ברשימה זו אינם קורים אצל סדר מנוסה; ידיעתו את

עצירתה הפתאומית של המכונה באמצע מהלכה, מקורה בליקוי  
מיכני או בפעולה בלתי נכונה של הסדר. רובם של המעצורים  
המובאים ברשימה זו אינם קורים אצל סדר מנוסה; ידיעתו את

עצירתה הפתאומית של המכונה באמצע מהלכה, מקורה  
בליקוי מיכני או בפעולה בלתי נכונה של הסדר. רובם של  
המעצורים המובאים ברשימה זו אינם קורים אצל סדר

Fig. 17 – Top to bottom images: Koren, Hadassah (Yardeni, 1997). Hazvi (Masterfont: HazviMF Bold 12pt). Narkis Block (NarkisBlockMF medium 12pt) and David Hebrew (Yardeni, 1997).



The lack of typefaces for continuous text in small sizes became an obstacle for the blooming printing and publishing industry. The long process of design and production created great anticipation for the appearance of new typefaces in the market.<sup>21</sup>

The long awaited answer for that demand came in the short period between 1954 and 1958 with the release of five new Hebrew typefaces: Hazvi (Hausman & Spitzer), Koren (Koren), Hadassah (Friedlaender), Narkis Block (Narkis) and David Hebrew (David). The process of their creation spread over decades, allowing for a thorough and dynamic design process that involves close inspection and repeated testing (Fig. 17).

Ismar David's typeface was perceived with much enthusiasm when it was first released. Correspondence with type manufacturer regarding its production shows both the urgency and excitement to publish the new design. For example, in a letter sent to David from A. Cogan, the representative of the Intertype Corporation in Israel in 1959, Cogan specifies the need for 10 point matrices to be ready for distribution in Israel in time for the upcoming government election (Fig. 18).<sup>22</sup>

<sup>21</sup> Schocken (1946) p. 252.

<sup>22</sup> RIT Cary Graphic Arts Collection. The archive of Ismar David 1.6.pdf. pp 2-3.

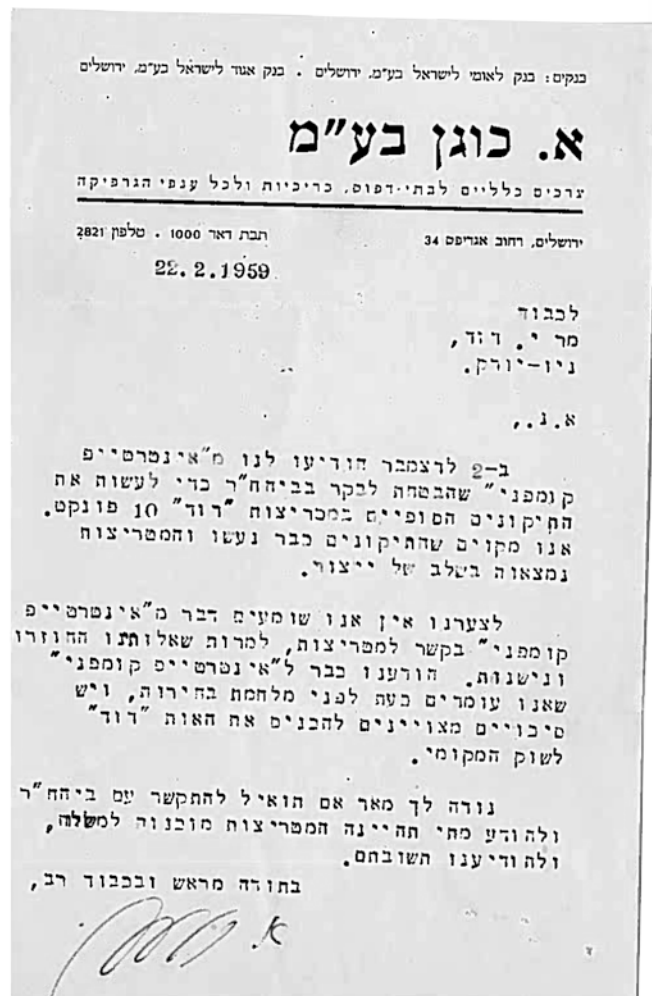


Fig. 18 – The letter from A. Cogan, the representative of the Intertype Corporation in Israel, addressing the issue of the distribution of the David typeface in Israel in time for the upcoming government election (RIT Cary Graphic Arts Collection. The archive of Ismar David).

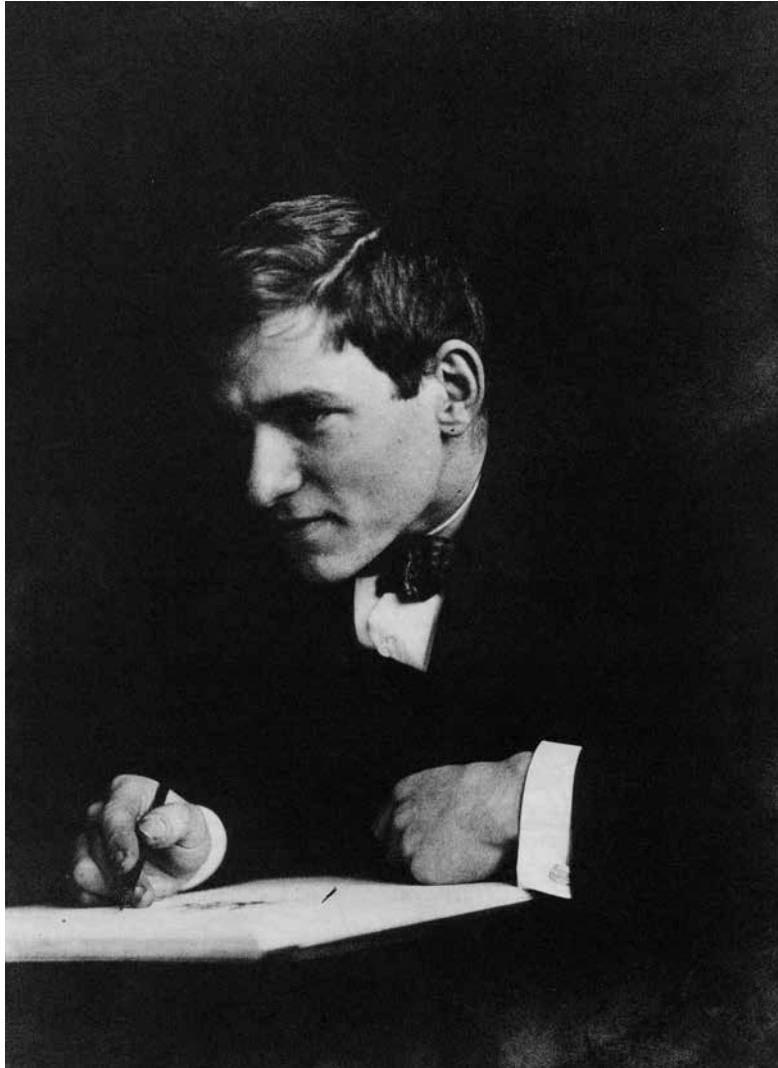


Fig. 19 – Ismar David, Berlin ca. 1930 (Brandshaft, 2005).



Fig. 20 – David's linear style of illustration. Change of address card from when Ismar and Dorothy moved to the Bronx in the early 1970s. Offset lithography (Brandshaft, 2005).



Fig. 21 – The 1932 Jewish National Fund *Golden Book*. This is the cover design that won David the international competition and enabled him the move to Jerusalem (IDEA, n.d.).

### 3 Ismar David and his creation of David Hebrew

#### 3.1 Ismar David's life and career

##### From Breslau to Berlin 1910–1932

Ismar David was born in 1910 in Breslau, Germany (now Wrocław, Poland), son of Benzion Wolff David who owned an insurance business and Rosa Freund, a school teacher. Along with his older brother and younger sister, the family maintained traditional domestic Jewish practices. His father, although strictly observant, regarded himself an emancipated German Jew. He managed to reconcile the Jewish law with his strong local and more secular identity and the family participated regularly in the intellectual and cultural activities around the city. The children were provided with the advanced German literature and education of that time (Fig. 19).

David was sent to school, however, he never excelled as a student. At the age of ten he underwent surgery for a crossed eye and subsequently suffered from double vision, not being able to see with both eyes simultaneously. Later in his life, he suggested that the lack of depth and perception may have contributed to his distinctive linear style of illustration (Fig. 20). At the age of fourteen he left his formal studies to become the apprentice of a house painter. At the time this profession required technical specialisation and artistic skill. It provided him with experience and knowledge that served him throughout his career.

In 1928, David left for Berlin to stay with his uncle, Ismar Freund, who was a leader in the local Jewish community. His relocation provided him with the social and professional stimuli that he yearned for. After self training in drawing, he entered Berlin's municipal school for the arts and crafts (Städtische Kunstgewerbe- und Handwerkerschule) in Charlottenburg, where many of the finest book craftsmen of the time taught and studied. Hans Orłowski and Johannes Böeland were amongst his most influential teachers. There he mastered applied arts and first learned of the importance of understanding culture and tradition in letterforms used in writing.<sup>23</sup>

##### Two decades in Jerusalem 1932–1952

In 1932, at the age of twenty one, David entered and won an international design competition for the Jewish National Fund, *Keren Kayemeth LeIsrael*. His design was chosen for the cover of *The Golden Book*, an honorary book that recorded key members of the Jewish community and their contribution and donation to the preservation, care and development of Palestine and Israel (Fig. 21).<sup>24</sup>

<sup>23</sup> Brandshaft (2005) pp. 13–19.

<sup>24</sup> Jewish National Fund. *Books of Honor*. <http://www.kkl-jnf.org>, accessed July 2016.



Fig. 22 – Jerusalem stamps for the Jewish Agency, 1948. The stamps were printed in a trial issue and were never used because on the siege of the city. Photostatic copy of line art (IDEA, n.d.).



Fig. 23 – Symbol of the Israel rail. India ink on bristol board, ca 1924–52 (IDEA, n.d.).



Fig. 24 – Emblem for the twenty third Zionist Congress 1951. India ink on bristol board. That was the first congress to be held in the state of Israel (IDEA, n.d.).

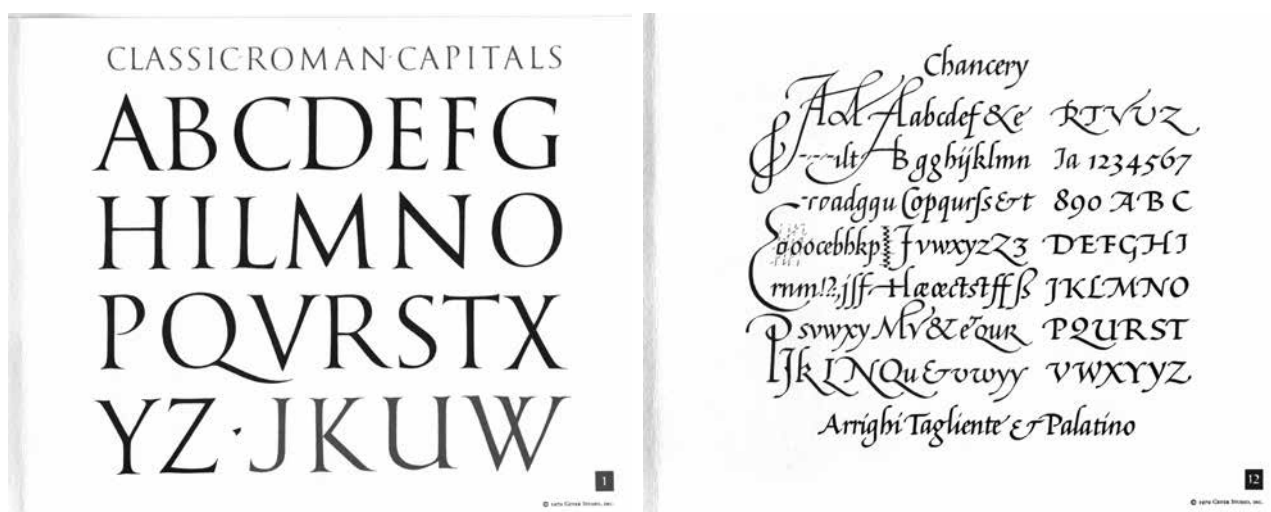


Fig. 25 – Charts from David's book *Our calligraphic heritage*. Left image: classic roman capitals. Right image: chancery (David, 1979).



Fig. 26 – Charts from David's book *The Hebrew letter: calligraphic variations*. Left image: Sephardi style . Right image: Ashkenazi style (David, 1990).

David travelled to Jerusalem in order to supervise the production of the book. He spoke the Ashkenazi Hebrew he had learned in his childhood and quickly found a home with the local community of German emigrants. As the Nazi party rose to power in Germany, he settled in Jerusalem and established a studio for graphic and interior design.

David became very successful and the large scope of local commercial projects he worked on called for a range of Hebrew typefaces that did not exist, so he created the lettering and the sets of alphabets he needed for his projects himself. It was during this time that the seeds of the David Hebrew typeface were planted.

With the declaration of the state of Israel in 1948, David accepted commissions from national institutions and the state government. He designed various projects including posters, postage stamps, currency and state symbols, and was amongst the pioneers of graphic design and typography of that time (Figs. 22–24).<sup>25</sup>

### **A prolific career in New York 1952–1996**

During the two decades of work and residence in Jerusalem, David accepted commissions from overseas and made several work related visits to New York. In 1939, he first travelled to supervise the installation of his design for an exhibition inside the Palestine Pavilion at the New York World's Fair. On that visit he first contacted the Intertype Corporation regarding the production of the David Hebrew typeface family. In 1953, he left Jerusalem and moved permanently to New York. He established a design studio and began teaching Latin and Hebrew calligraphy at the Cooper Union and the Pratt Institute.

David was an assiduous freelance designer and artist throughout his entire career. In addition to his work on book jackets and covers, calligraphy and lettering, he earned commissions for book illustration and developed his distinguished linear style. Later in his career, he created architectural designs and three dimensional decoration objects, mostly of Jewish religious proclivity, all incorporating his calligraphy and lettering. In 1977, David published the calligraphy book *Our calligraphic heritage* with the New York based Geyer studio. The book contains text, illustrations and charts which deal with historical, aesthetic and technical aspects of calligraphy. In addition, it presents reproductions of selected examples of major historic styles, as well as a collection of compositions keyed to those styles. Each composition had been created to demonstrate how classic styles can be used as motifs for contemporary graphic and calligraphic purposes (Fig. 25).<sup>26</sup> In 1990, he published *The Hebrew letter: calligraphic variations* with Jason Aronson inc. in Portland. David created this book for Hebrew calligraphers seeking the understanding of different historical style variations (Fig. 26).

Ismar David was described as a warm and vibrant man, with a quirky sense of humour. Throughout his career and until his death in 1996, he was a highly motivated, diligent designer and artist who was immensely devoted to his work.

<sup>25</sup> Beletsky, Misha. (2011) *The book jackets of Ismar David, a calligraphic legacy*. New York: RIT Cary graphic arts press, Rochester. The typophiles. pp. 8–25.

<sup>26</sup> Geyer Studio. *Writing Book by Ismar David*. <http://calligraphyheritage.com>, accessed July 2016.



Fig. 27 – David tested his concept for the new Hebrew typeface family by pasting up letters. Lud cigarettes. Courtesy of Helen Brandshaft, n.d.



Fig. 28 – David tested his concept for the new Hebrew typeface family by pasting up letters. Sharon cigarettes (IDEA, n.d.).

### 3.2 The creation David Hebrew

#### 3.2.1 Approach to the design

An ongoing theme in Ismar David's work was finding the balance between tradition and progress. In a letter to his former teacher Johannes Böhlend in 1950, he reflected on the importance of cultural heritage integrated with innovation and contemporary demands:

“... We should study and absorb the development of writing styles, and try to understand the cultural epochs that these styles reflect. But then we should try to express them in a new way that mirrors our own feeling and time and reverberates with the pulse of our own era.”<sup>27</sup>

As a graphic designer in Israel, David experienced the severe shortage in typefaces. He recognised the need for a new Hebrew typeface that would properly accommodate communication in the emerging revival of the Hebrew language; a typeface that would reflect the spirit of the language as a secular one, without disregarding its past and authenticity. He envisaged the type to derive from old Semitic forms and to be close in structure to the Middle Eastern letterforms, rather than the styles developed in Europe at that time. His aim was to reduce the characters shape to their essential elements and create a basic and authentic form.<sup>28</sup>

He then challenged himself with the creation of a comprehensive family that would provide local practitioners with the equivalent typographic variety and quality of the Latin type available in Europe. The scheme was a family consisting of a regular style and a cursive version to function the way Latin italic does. He then added a monolinear version, the equivalent of a Latin sans serif, an addition that was not common within typeface families at the time.<sup>29</sup> Each of these variations were planned from the beginning of the process in three weights: light, medium and bold.

#### 3.2.2 Testing innovation

More than a decade had passed since David initiated the design of the David Hebrew typeface family until he prepared the final drawings for typecasting production. He first contacted the Intertype Corporation regarding the production of the typeface in 1939. However, the correspondence was broken off by the Second World War and renewed only in the early 1950s previous to David's relocation to New York.

David was aware of how innovative the design of his typeface was and of the fact that it looked significantly different from what readers expected at the time. The long period of developing and refining the typeface allowed him to test the acceptability of the design with his audience. He pasted up advertisements using the new forms, in newspaper ads, as display matter and on signboards he designed during that period. The reaction to the new forms was positive and he gained the confidence to proceed and finalise the typeface (Figs. 27–28).

<sup>27</sup> Brandshaft (2005) p. 19.

<sup>28</sup> Ibid. p. 20.

<sup>29</sup> Stern (2015–16) p. 50.



Fig. 29 – David's design for verses from Genesis for the *Liber Librorum* book. This is the first time the David Hebrew typeface was published, printed alongside the Monotype Dante typeface (IDEA, n.d. Scale: 33%).



Fig. 30 – A page from Agnon's book *A Stray Dog*. The first book to be typeset with the David Hebrew typeface, using both regular and cursive styles (Wardi, 2009–15. Scale: 20%).

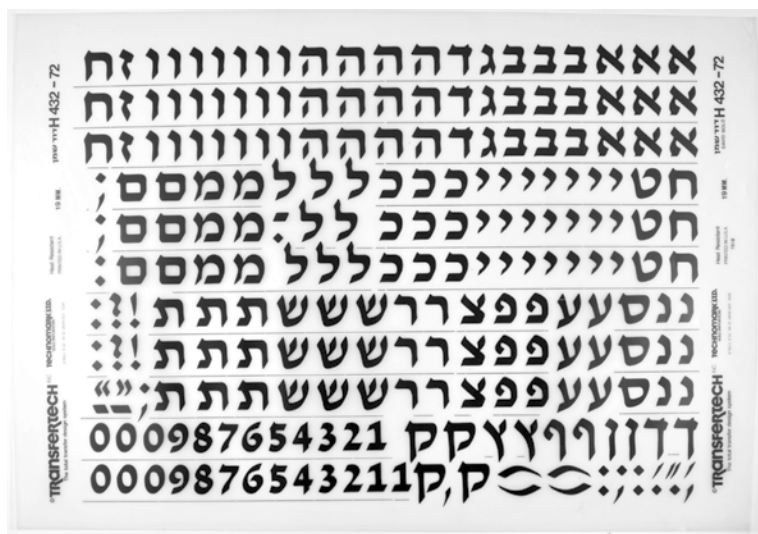


Fig. 31 – Transfertech David bold (RIT. Scale: 25%) ©Technomark Ltd.



Fig. 32 – Letraset David bold (RIT. Scale: 25%) ©Letraset Limited 1984.



### 3.2.2 Production

#### Type casting machines

The first international showing of the David Hebrew typeface was in 1955, in the *Liber Librorum* project: a collection of sample Bible designs commemorating the four hundred anniversary of the Gutenberg Bible. David designed a bilingual Hebrew and English page with verses from Genesis. The type was cast on a Thompson caster<sup>30</sup> with David's full consent, although without his supervision (Fig. 29). Around 1954, the first sets of the David Hebrew typeface in the regular and the cursive styles were issued by the Intertype Corporation under David's supervision.

A version of the David Hebrew typeface was produced by the Jerusalem Foundry in the early 1960s in Israel. The foundry was owned by Dr Moshe Spitzer (1900–1981), one of Israel's pioneers of Hebrew type design and typography. Dr Spitzer was a researcher of the Hebrew letter, a writer, and the founder of the Tarshish Publishing House. He developed Hebrew typefaces and participated in their designs. He advised David on the design of the David Hebrew typeface and included it in his writings as an example of a new typeface that derives from authentic Hebrew letterforms.<sup>31</sup> Dr Spitzer also chose the typeface for Agnon's novel *A Stray Dog*, published in 1960 and was the first complete Hebrew book to be printed in the David Hebrew typeface regular and cursive styles (Fig. 30). In 1956, Dr Spitzer requested David's permission to cast the David Hebrew typeface for hand typesetting in several sizes. They reached an agreement around 1960. The original drawings had to be adjusted to fit with the foundry's casting process. The changes made to the lettershapes were not to David's satisfaction. In a letter to Yehuda Miklaf<sup>32</sup> he wrote that he was never shown samples and never approved the design. In addition he notes that he considers the serif-like beginnings of each letter a misinterpretations of his design.<sup>33</sup>

#### Dry rub-down transfer

In 1980, Ismar David was corresponding with Transfertech Technomark Ltd., a company that produced dry rub-down transfer sheets. The Israeli type designer Shmuel Sela tells of a meeting he attended with David during his visit to the company in Israel. Sela provided a proof sheet of the regular and cursive styles in three weights that David approved. He tells David commented on this version being more calligraphic than the Intertype version (Fig. 31).<sup>34</sup>

In 1982, David was approached by Arta Letraset Ltd. with a request to come to a fresh arrangement, after previous ones for commercialising the typeface designs in dry transfer have fallen through. One year later, a version of the regular style in two weights was finalised and released. This design version carried more resemblance to the version released by the Intertype Corporation (Fig. 32).<sup>35</sup>

<sup>30</sup> A device which casts from Linotype matrices.

<sup>31</sup> Spitzer (1981) p. 45.

<sup>32</sup> Yehuda Miklaf is a Jewish-Canadian Bookbinder who emigrated to Jerusalem and established the Shalom Yehuda press in 1990.

<sup>33</sup> From a response letter to Yehuda Miklaf dated December 24, 1990 Toldeo (2003).

<sup>34</sup> From correspondence with Shmuel Sela, June 2016.

<sup>35</sup> RIT, 1.12.pdf, pp. 2–3



## Photo-composition

In 1984 D. Stempel AG Schriftgießerei in Frankfurt am Main contacted Ismar David for permission to issue his typeface for use on CRTronic photo-composition systems, on a Mergenthaler Linotype phototypesetting machine. David delivered all basic artwork for the light and bold weights, including all vowels and diacritical marks that were not yet designed. He also added descriptions for the positioning. Stempel made all mechanical duplications and supplied final proofs for David to approve prior to the release (Fig. 33).<sup>36</sup>

More versions for photo-setting were produced in the 1980s without David's supervision. He was aware of the more dispiriting outcomes of versions based on his design and articulated on how it was possible to lift a lettershape, but not the space around it.<sup>37</sup> In the letter to Yehuda Miklaf previously mentioned he notes:

“... I realize that a typeface design, if successful, becomes public domain. It becomes an image just as older styles, which we may admire or reject, but by the nature of type become the input for other designers. I am only unhappy if, as has happened, someone lifts the design but calls it DOVID to shirk any responsibility for lifting” (Fig. 34).<sup>38</sup>

## Digital type

In the 1980s, a digital version of the David Hebrew typeface was made for IBM with Ismar David's involvement. It was the first and last digital version that David oversaw and approved.<sup>39</sup>

A decade later versions of the regular style were digitised, first in two and later three weights, by Shmuel Guttman (1925–2006), for Microsoft. This version was shipped with Windows 3.1 through Windows 10 and in Microsoft Office software. It carried very little resemblance to the original typeface.<sup>40</sup>

Two Israeli foundries sell versions of the David Hebrew typeface. The Masterfont foundry offers a typeface by the name of David as a family of four variations: a regular, a ‘fake slanted’, a bold and a ‘fake slanted’ bold, as well as another narrow version called David Mootzar in a regular weight only.<sup>41</sup> The Fontbit foundry sells two versions in three weights called David Hadash<sup>42</sup> and David Hadash Moorhav<sup>43</sup> designed by Nadav Ezra.<sup>44</sup> Both of the Israeli foundries based their designs on Ismar David's typeface, however, their adaptations presents various differences when compared with the original David Hebrew typeface.

In 2012, Monotype foundry released the David Hadash typeface through an exclusive license with Ismar David's estate, also sold through Linotype and Nonpareil Type. Helen Brandshaft, who had worked with David for many years, restored and redrew the typeface family with great acuity and accuracy. Monotype made the entire font family available for digital typesetting, including the cursive style, and for the first time, the monolinear style. Accents used to provide a guide to the ritual chanting of Hebrew Biblical texts in the synagogue called cantillation marks were added as well.<sup>45</sup>

In 2016, the David Libre typeface was constructed by Meir Sadan, for the Google Fonts project. This version is based on the David Hadash Formal released by Monotype in 2012. It was adjusted to be compatible with the version commonly installed on PCs, therefore the glyph size has been reduced by 12.5% (Fig. 35).<sup>46</sup>

<sup>36</sup> RIT. 5.124.pdf. p. 66.

<sup>37</sup> Brandshaft (2005) p. 31.

<sup>38</sup> Toledo (2003).

<sup>39</sup> RIT. Box 32, folder 556.

<sup>40</sup> Microsoft typography. *Fonts and Products. Font Families. David*. <https://www.microsoft.com/typography/fonts/family.aspx?FID=234>, accessed July 2016.

<sup>41</sup> *Mootzar* is the Hebrew word for narrowed. Masterfont. *David*. <http://www.masterfont.co.il/David-Regular>, accessed July 2016.

<sup>42</sup> *Hadash* is the Hebrew word for new.

<sup>43</sup> *Moorhav* is the Hebrew word for extended.

<sup>44</sup> Fontbit. *David*. <http://fontbit.co.il/search>, accessed July 2016.

<sup>45</sup> Linotype. *David Hadash*. <https://www.linotype.com/6712/david-hadash.html>, accessed July 2016.

<sup>46</sup> David Libre. (2016) <https://fonts.google.com/specimen/David+Libre>, accessed July 2016.

## על המשמעות הטמונה באותיות

סימפוזיון המוקדש לטיפוגרפיה עברית באזורים דוברי גרמנית הוא אירוע מיוחד במינו עבור האוניברסיטה הטכנית של קלן. מפגש זה חושף את הישגיו הראשוניים של פרויקט יחודי בשיטתו ובתכניו, שהוביל את האוניברסיטה שלנו בנתיבים חדשים לה. אפתח, אם כן, בהבעת שביעות רצוני מתוצאות הביניים המרשימות שהושגו על ידי המשתתפים בפרויקט, במהלך השנתיים שעברו מאז שהחל בקשיים מרובים. תרצאות אלה דרבנו את כל המעורבים בפרויקט להמשיך במפעל הגדול של איסוף, השוואה וניתוח דוגמות אותיות עבריות מהאזורים דוברי הגרמנית, והפיכתן נגישות למתעניינים בעולם כולו.

קסם כפול יש בעבודת מחקר זו עברית. ראשית, מבעד לגישה ההיסטורית-ביקורתית שבבסיס המחקר נשקפת המסורת התרבותית הארוכה והמרשימה של עיסוק בכתב העברי. שנית, בפרויקט נפגשים שני עולמות: עולמו של כתב עתיק וקדוש ועולם המחשבים והצפנים הדיגיטליים. שני עולמות אלה חודרים זה לתוך זה ומאירים זה את זה. ברצוני להעיר מספר הערות אישיות על שני היבטים אלה.

א.

רבי לוי יצחק מברדיצ'ב, ממורי החסידות הגדולים במאה ה-18, נשאל פעם מדוע חסר הדף הראשון בכל מסכתות התלמוד הבבלי. הוא ענה: "אל לו לקורא לשכוח, שאין ביכולתו לפענח אפילו את הדף הראשון". הבנה זו מאפשרת לנו לאמץ את היחס הנכון כלפי הכתוב. וכפי שרגיל היה הרבי להמשיך: "גש אל המלה הכתובה בענוה ולב חכם".

המלה "ענוה" מציינת כי אותיות אלה – הטיפוגרפיה העברית – נושאות אופי רוחני ומשמעות תרבותית וכן תפקיד חברתי – כל אלה דורשים מהאדם לחוש כל פיהן יחס מיוחד, כלומר, ענוה. המלה "חכמה" רומזת שלאותיות אלה, הסוררות למדי, יש לגשת בתבונה ומתוך חדות הגילוי. הכתב העברי הוא אתגר רוחני והזמנה מתמשכת לקורא אותו. זה המסר המועבר מתולדות התפתחות כתב זה וגלגולי השימוש בו. המשתתפים בפרויקט המחקר אודות הטיפוגרפיה של האות העברית ודאי חשו בזאת, בדרך זו או אחרת. אופיו המיוחד ותפקודיו המורכבים של הכתב העברי מתגלים בברור ברבדים שונים במהלך ההיסטוריה. לדוגמה, מידת הגימטריה, שבה ניתן פירוש למלה או

לצורה מילים על יסוד ערכן המספרי של האותיות. ברצינות מבודחת ניתן לראות זאת כצורה מוקדמת של עיבוד ספרותי של אותיות. בספר יצירה, ספר היסוד של הקבלה היהודית, נגזר מהטיפוגרפיה יקום רוחני שלם. מאז התמזגו אותיות האלף-בית למערכת שובת לב של פולחן ותרבות, ומאז שולטת בשפה העברית מערכת יחסים יחודית לממלכת השפות בין האלף-בית לקורא: יש לפענח לא רק את משמעות הכתוב, אלא גם את הסימן המודפס עצמו. רק הקורא הנבון יגלה למשל בארבעת פינות האות א' את ארבעת החכמים, שעל פי המסופר בתלמוד, הורשו להיכנס לפרדס, ממנו יוצאים ארבעת נהרות העולם. בדרך זו התפתחה מתוך הטיפוגרפיה דרך הבנה פילוסופית של הצורות הסמליות של האלף-בית.

פרוש כזה של הטיפוגרפיה חייב קנוניזציה קפדנית של צורות האותיות. ואכן למעלה מ-150 חוקים מסורתיים מגדירים את צורת האות העברית. חובה לשמור על חוקים אלה בקפידה, על מנת שמרסם המשמעות לא ייפגע. לפיכך, מרשים במיוחד המגוון הטיפוגרפי העשיר שהתפתח על בסיס חוקים אלה, כפי שמראים ממצאי הביניים של פרויקט המחקר. לדוגמה, על פי המסורת יש להציב תג קטן בעל כתר זעיר בקצה חלקה השמאלי העליון של האות ב', משום שאות זו מסמלת את השער דרכו, ביום מן הימים, יכנס המשיח לעולם. הקוץ, הנראה לעתים בקצה העליון של האות י' – שהיא האות היחידה באלף-בית העברי המרחפת חופשיה בחלל הכתיבה – הוא שאמור לחבר את האות אל השיטה, היא קו השורה העליון: שהרי לכל דבר בעולם יש מקום קבוע. והאותיות, כפי שנאמר בספר יצירה, הן "עשירים ושתיים אותיות יסוד [הבריאה]". מסיבה זו גם שני החלקים המרכיבים את האות ק': כי כפופה וז', מופרדים זה מזה כחוט השערה – רמז לשבר שחל בבריאה מאז החטא הקדמון. אלה הן דוגמות מעטות למסורת תרבותית של פענוח טיפוגרפי, שהיא אפשרית וממומשת רק באותיות העבריות. מסורת זו מניחה מראש מיומנות יוצאת מן הכלל של הבחנה צורה ניה חדה מצד הקורא. עליו לזהות גם את הזעירים שבמאפייני האות. מנקודת מבט זו יש למסורת ארוכה ומזהירה זו הקבלות מפתיעות לגישה הקפדנית הננקטת בפרויקט המחקר הנוכחי, המתעד את הקל שבחבדלים ובשינויים שבסימני הדפוס העבריים.

Fig. 36 – A page from the book *Hebrew typography in German-speaking regions* using the regular style for the main text and the cursive style for word differentiation. The version of this typeface was made by the Hamburg based Elsner+Flake foundry under the name EF David. (Fachhochschule Köln, 2001).

### 3.3 Usage of David Hebrew

The David Hebrew typeface gained great popularity when it was first released and was widely used in Israel for a multitude of purposes such as advertisements, informative catalogues, poetry books and newspapers. Over the years the popularity of the typeface declined and although the complete family is available now as digital type, examples of contemporary use are quite rare.

Several speculations can be made in an attempt to understand the reasons leading to the decline in usage of the David Hebrew typeface in current days. One reason could be related to the typeface version called David Guttman released in 1998 for Microsoft. While displaying very little resemblance to the original design, the regular style became predominantly used in the Word processing software by users who are not professional typographers. This version also became the official typeface for Israeli bureaucratic correspondence.<sup>47</sup> Subsequently, the name of the typeface became synonymous with amateur typesetting. It is possible that lacking the awareness of the features and benefits of the original design, typographers avoid using the authentic David Hebrew typeface.<sup>48</sup>

Another explanation has to do with conventions of Hebrew typesetting in Israel. Although Ismar David accomplished a genuine Hebrew cursive style to accompany the regular style, in a similar way italic would in Latin, it never became a common typographic tool for Hebrew text differentiation. David's correspondence with the Intertype Corporation representative in Israel A. Cogan proves the lack of demand for the cursive style in 1960:

"You probably know that your 10pt David Medium with Bold [has] been met with favourable attitude from Israeli printers. [I have] sold all I had and have now many more orders with Intertype [...]. It is pity only that the 12pt has [been] cut with Italic which is of very little use here. It would be better to have the 12pt Light duplexed with 12pt Medium or Bold instead of the Italic."<sup>49</sup>

Although not part of Hebrew typesetting convention in Israel, the need for a Hebrew equivalent to the Latin italic arises in multilingual publications. The book *Hebrew typography in German-speaking regions* was published in 2001 in Germany. It is typeset in three languages: German, English and Hebrew. Both the German and English texts are using an italic style for word differentiation. For the Hebrew text, the David Hebrew typeface is used in the same manner, with the cursive style accompanying the regular style. The fact that the David Hebrew typeface offers an authentic equivalent to the Latin italic style provides a typographic tool that creates consistency in the typesetting of documents that incorporate both Hebrew and Latin (Fig. 36).

It seems David's vision and his masterfully executed designs were avant-garde for his time when resources of printing and typesetting were still limited in Israel's early days as a struggling country that did not enjoy economic and political stability. However, with current technology and the relative ease of production a digital version of David's ground-breaking comprehensive typeface family is now digitally available and therefore can be utilised by typographers and provide Hebrew readers with a richer reading experience.

<sup>47</sup> David Libre (2016).

<sup>48</sup> Yaronimus (2014).

<sup>49</sup> RIT. 1.6.pdf, p. 4.

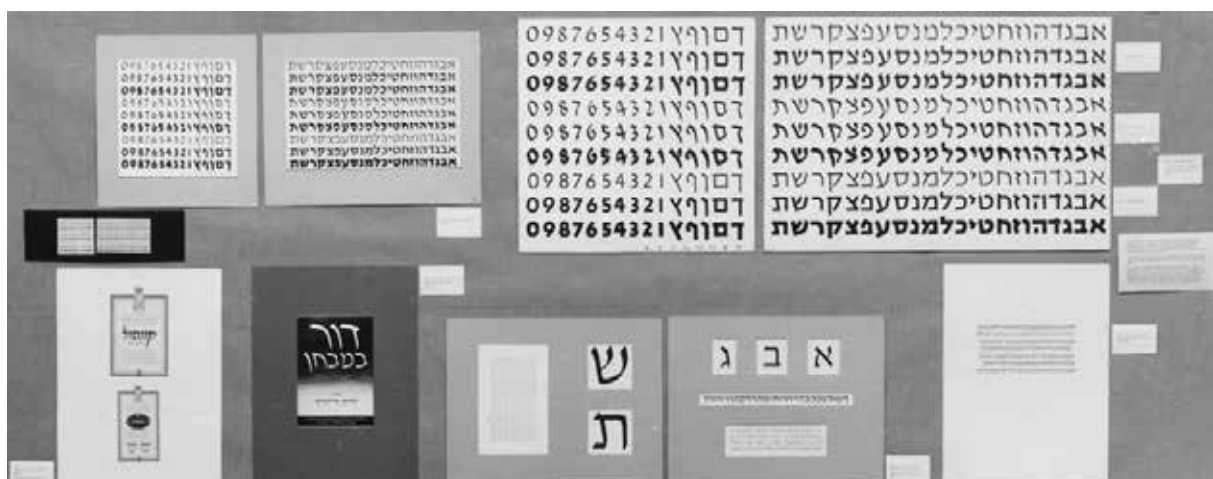


Fig. 37 – The concept of the comprehensive David Hebrew typeface family as it was displayed in Ismar David's solo exhibition at the Jewish Museum in 1953, including the matching numerals for each style and weight (IDEA, n.d.).

## 4 Analysis of the David Hebrew typeface family

This chapter examines the members of the David Hebrew typeface family in order to gain an understanding of the relationship between the styles and weights. By inspecting the issues that Ismar David himself mentioned regarding the family, such as the historic references and the technology, it looks to unveil the systematic thinking he applied to the design of the family.

A large undated ink drawing made by David of the final concept of the comprehensive David Hebrew family is kept at the RIT Cary Graphic Arts Collection. Unfortunately, it was not available for this dissertation. Therefore, the image used for the analysis is a copy of this drawing, published in the book *The work of Ismar David*.

It is most likely that for the production of the book the RIT made a photostat from the large original<sup>50</sup>, then the printer of the book made the scan of the photostat. The scanned image was slightly retouched, assuring that no changes affected the lettershapes or the spacing.<sup>51</sup> It seems as though this is the image that was also published in the article *Hebrew typography* by Dr Moshe Spitzer for the Schoken-Festschrift in 1947 and was displayed in a solo exhibition of Ismar David's work at the Jewish Museum in New York in 1953 (Fig. 37). It is regarded as the best available representation of the complete original typeface family. It is shown in Fig. 38 in the true size of the of the book's reproduction (overleaf).

Since only the regular and cursive styles were published with the Intertype Corporation in their light weight version under David's supervision, there are no available prints that include authentic typeset and printed examples of all styles and weights. Therefore the analysis will focus on the lettershapes themselves and will not cover the family's features and function at a paragraph or a page level, such as the spacing, the appearance of emphasis and differentiation and more. David also designed matching numerals for each style and weight. Since no drawings of them are available for this dissertation, they will not be included in this analysis.

The names used for the styles varies across available documentation. They are interchangeably referred to as standard or book, oblique or cursive and sans serif or even stroke. In this dissertation, descriptive names were chosen to allow consistency. The three styles are referred to as regular, cursive and monolinear. The weights were defined by Ismar David as light, medium and bold.

<sup>50</sup> A copy made with a camera-based photocopying machine on sensitised photographic paper.

<sup>51</sup> From correspondence with Helen Brandshaft, August 2016.

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Fig. 38 – The source image for the analysis of the original ink drawing of all the David Hebrew lettershapes, as printed in the book *The work of Ismar David*. (Brandshaft, 2005. Scale 100%).



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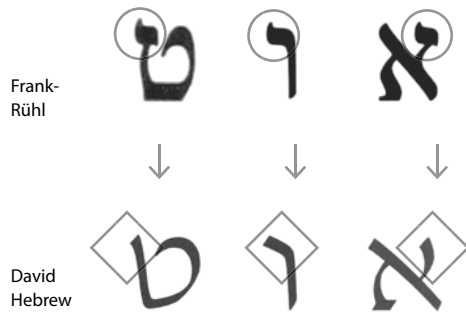


Fig. 39 – A comparison of the traditional looking tags in the widely used Frank-Rühl typeface with the innovative flaring of outsrokes in the David Hebrew typeface. (C. F. Rühl, 1910. Brandshaft, 2005, rearranged by the author).

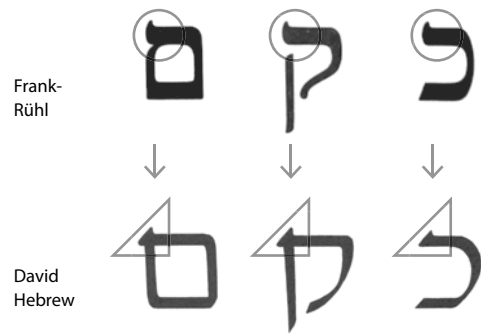


Fig. 40 – A comparison of the tags in the Frank-Rühl typeface with the David Hebrew typeface. The triangular shape of the tags is one of the unique and innovative features of the David Hebrew regular style. (C. F. Rühl, 1910. Brandshaft, 2005, rearranged by the author).

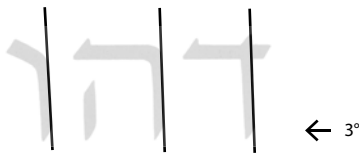


Fig. 41 – The slight inclination to the left emphasises the direction of the Hebrew script that is written from right to left and contributes to the flow of the lettershapes. (Brandshaft, 2005, rearranged by the author).



Fig. 42 – Strokes featuring the nature of a broad nib pen as a reference to the calligraphic origin of the script. (Brandshaft, 2005, rearranged by the author).



Fig. 44 – The inclination to the left emphasises the direction of the Hebrew script and contributes to the flow of the lettershapes. (Brandshaft, 2005, rearranged by the author).

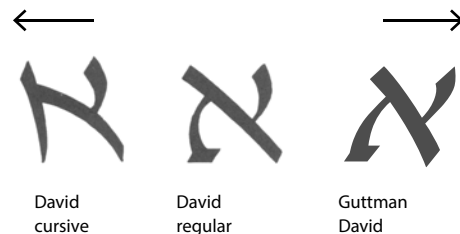


Fig. 45 – Directions of inclination of the Hebrew letter Alef. Left image: the David Hebrew cursive style, leaning to the left. Centre image: The David Hebrew regular style. Right image: the Guttman David typeface, the Microsoft version that allows a mechanical slant to the right direction, opposite the natural direction of the Hebrew script. (Brandshaft, 2005. MS Word 2016, rearranged by the author).

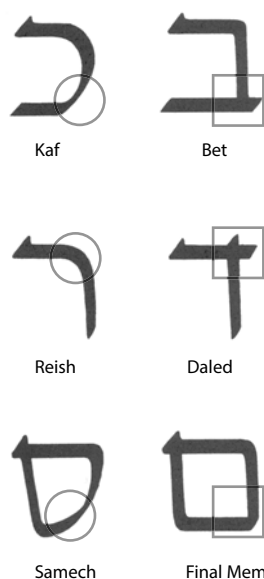


Fig. 43 – Letter differentiation in the David Hebrew regular style. In these pairs of easily mixed up letters the treatment for the joints differentiates the letters clearly. (Brandshaft, 2005, rearranged by the author).

## 4.1 Design features of the three styles

Although related, each style of the David Hebrew typeface family carries its own features and characteristics. This section inspects every style separately.

### 4.1.1 The regular style

In his article *The design of the Hebrew letter in the first decade of the state of Israel* Prof Adi Stern identified the unique and innovative features Ismar David incorporated in the design of the David Hebrew typeface family. In the regular style, in some of the letters, there is a flaring of the outstroke that replaces the traditional tags.

This design solution replaces the heavy looking serif-like tags that were used in most of the existing Hebrew typefaces at the time, with a basic, organic and temporary component (Fig. 39). In the letters where the tags do appear, they are of a triangular shape that was never seen before in any other typeface. (Fig. 40). The original design of the tags is in remembrance of the original reed pen stroke used for writing of early Hebrew manuscripts. It gives the impression of handwritten shapes produced with ink.<sup>52</sup> Other typefaces usually imitated these manuscript features exactly, and did not interpret them typographically the way David did.

The regular style is not upright but slightly inclines to the left at an average angle of about three degrees. This feature emphasises the direction of the Hebrew script that is written from right to left and contributes to the flow of the lettershapes (Fig. 41). The strokes of this style feature the nature of a broad nib pen with modulation creating a contrast between the thin and the thick strokes. This shows a reference to the calligraphic origin of the script (Fig. 42).

The design solution David applied for the specific Hebrew letters that often suffer from lack of differentiation is highly effective. In those easily mixed up letters the treatment for the joints differentiates the letters clearly: one is a round and continuous curve while the other more square shaped and composed of two strokes (Fig. 43).

### 4.1.2 The cursive style

This David Hebrew cursive style was, and still is, the most significant attempt to create a genuine inclined and cursive Hebrew variation, that functions as a complimentary style for text differentiation, similar to the way in which many italics functions in Latin type setting. This style is a distinguished set of characters that was designed using the Hebrew cursive and semi-cursive calligraphic styles as references. It is not a mechanical slant of the regular style.<sup>53</sup> The letters incline to the left in an average angle of about nine degrees (Fig. 44) and follow the Hebrew innate reading and writing direction, unlike the mechanical inclination towards the right, that follows an opposite direction and when poorly designed breaks the flow of reading (Fig. 45).

In all likelihood David's vast experience with bilingual calligraphy as well as his understanding of Latin typesetting led him to the decision regarding the design of the Hebrew cursive style. This shows David's true understanding of the background and history of italics, and the relationship between roman and italic in Latin.

<sup>52</sup> Stern (2015–16) p. 49.

<sup>53</sup> Ibid. p 50.



Fig. 46 – Strokes featuring the nature of a broad nib pen as a reference to the calligraphic origin of the script. (Brandshaft, 2005, rearranged by the author).

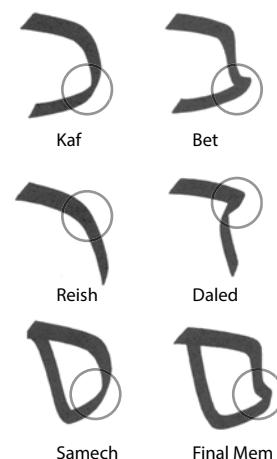


Fig. 47 – Letter differentiation in the David Hebrew cursive style. In these pairs of easily mixed up letters the continuous stroke is more elaborated in one of the letters to ensure the ease of its recognition. (Brandshaft, 2005, rearranged by the author).



Fig. 48 – The Hebrew letter Alef in some Hebrew typefaces compared with Alef in the David monolinear style. These typefaces that existed before and while Ismar David was working on his design show a symmetry that is alien to the Hebrew script. From left to right: Haim (Levit, 1929), Valish Block (Unknown, 1930), Miriam (Frank, 1924). (Wardi, 2015–16, rearranged by the author).



Fig. 49 – The slight inclination to the left emphasises the direction of the Hebrew script and contributes to the flow of the lettershapes. (Brandshaft, 2005, rearranged by the author).



Fig. 50 – The strokes of this style show no modulation, and do not reference a broad nib pen. (Brandshaft, 2005, rearranged by the author).

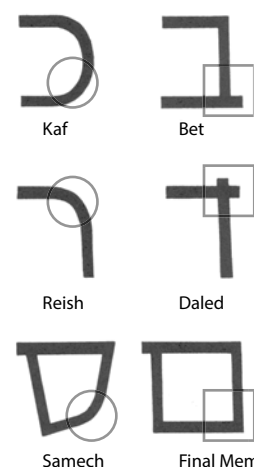


Fig. 51 – Letter differentiation in the monolinear style. In these pairs of easily mixed up letters a similar approach is seen as in the regular style of using round single stroke versus a square shaped joint of two strokes. (Brandshaft, 2005, rearranged by the author).

Rather than applying the features of italic styles, David's work proves how he thoroughly questioned some design decisions and applied the idea of a true italic, but not its features.

Similar to the regular style, the strokes of the cursive style reference the features created by the nature of a broad nib pen, resulting in a contrast between the thin and the thick strokes (Fig. 46).

In the case of letter differentiation, similar letters are both treated with a continuous stroke referencing handwriting, however, one of them will usually have a more elaborated stroke to ensure the ease of its recognition (Fig. 47).

#### **4.1.3 The monolinear style**

Many designers of Hebrew typefaces in the mid twentieth century were heavily influenced by Modernism, the Bauhaus movement and the De Stijl movement. They created geometric sans serif Hebrew typefaces that show extreme symmetry in their lettershapes. That symmetry is alien to the Hebrew script and blocks the natural flow of the lettershapes (Fig. 48).<sup>54</sup>

The David Hebrew monolinear style is clean and contemporary with no contrast between thin and thick strokes, apart from optical adjustments between horizontal and vertical strokes. It is geometric, however, avoids symmetry and as such echoes the origins of the Hebrew letter. The slight slant of an average of about two degrees is barely noticeable as a feature, yet it reflects the native inclination of the script and contributes to the flow of the typeface (Fig. 49). Unlike the regular and the cursive styles, the strokes of this style show no modulation and do not reference a broad nib pen (Fig. 50).

Although the shapes appear monolinear, measuring them reveals they are not of equal width. This suggests that Ismar David was aware of the need for optical adjustments in order to reach a technical and aesthetic level, equivalent to the high-quality of the Latin sans serifs of that time, while staying faithful to the nature of the script and without compromising its authenticity.

For differentiation between the almost identical letters in this style, a similar approach is seen as in the regular style of using round shapes versus a square shaped joint of two strokes (Fig. 51).

Ismar David did not live to see this monolinear style published and wrote about how his dream of the large family, including a sans serif, never materialised.<sup>55</sup> As mentioned previously, it debuted in 2012 as a Monotype typeface under the name of David Hadash Sans, as a member of the extensive David Hadash family.

<sup>54</sup> Stern (2015–16) p. 51.

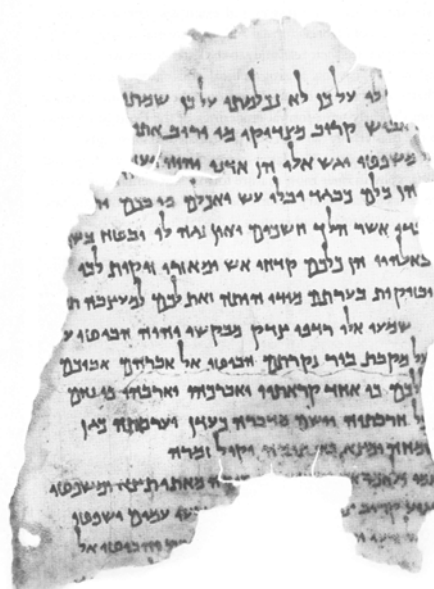
<sup>55</sup> Brandshaft (2005) p. 67.



52a – The mosaic of the zodiac in the centre of the Beth Alpha synagogue pavement ca. sixth century (Avi-Yonah, 1975).



52b – Burial tablet of king Uzziah ca. first century BCE to first century CE. Israel Museum, Jerusalem (David, 1990).



52c – Dead Sea Scrolls, Isaiah ca. first century BCE to first century CE. Shrine of the book, Israel museum, Jerusalem (David, 1990).

Fig. 52 – Some of the archaeological excavations findings that Ismar David may have been exposed to at the time he created the David Hebrew typeface family.

## 4.2 Design considerations

### 4.2.1 Reference and inspiration

Ismar David wrote about the influence his new surroundings in Israel had on his designs. He described how the landscape, the Middle Eastern way of life and the new social environment manifested in his work.<sup>55</sup> It is therefore not surprising that he drew inspiration from earlier Hebrew handwriting developed in his current region of habitat. Moreover, he understood the importance of studying the original structure of the Hebrew written letter prior to its transition to type.

The Hebrew typefaces used at that time were mostly produced in Europe. They were based on either the Ashkenazi style, the Sephardi style or a blend of both. Ismar David believed that they drifted far apart from the true shape of the Hebrew letter and were corrupted by European influences. The structure of the David Hebrew lettershapes was not based on an existing style, but rather on his understanding of the proper construction for the Hebrew letter.<sup>56</sup> David described his vision:

“What I set out to do was bring basic forms closer to true old Semitic forms [...] It was clear to me that these new designs would have to move much closer toward their Middle Eastern ancestors and away from those styles that had developed in Europe.”<sup>57</sup>

David’s study of the Hebrew letter and the influence of early Hebrew writing is noticeable across all three styles, although no knowledge is available regarding the specific images or sources he used for reference while designing the typeface. During his time in Jerusalem archaeological excavations revealed a variety of findings that contributed to the understanding of the Hebrew early writing and Hebrew epigraphy and palaeography.<sup>58</sup> It is most likely that David was exposed to examples such as the inscriptions in Beit She’arim, the mosaic pavement in Beth Alpha and the Dead Sea scrolls, and most probably used those for reference (Figs. 52a–c).

### 4.2.2 From calligraphy to type

Ismar David’s passion and talent for calligraphy are visible throughout his work. However, he was highly aware of the fact that the lettershapes must depart from calligraphic features in order to preform as type, even more so when restricted by technological issues such as the conditions of slug composition. Sketches from the archives may shed some light on the shift from calligraphic forms into lettershapes. Scribbles of Hebrew letters on a sheet that is neither titled nor dated, show resemblance to the David Hebrew typeface. They were scribbled next to each other on the same sheet of paper, some of them upside down, and appear to be drawn with the same tool. Assuming these were drawn before 1954, one version seems particularly similar to the David Hebrew regular style, showing its unique flaring of the outstrokes and triangular tags (Fig. 53 overleaf).

<sup>55</sup> Brandshaft (2005) p. 20.

<sup>56</sup> Beletsky (2002) p. 89.

<sup>57</sup> RIT (1974) 9.224.pdf. A draft for a talk at Typophiles luncheon celebrating Ismar David day.

<sup>58</sup> Stern (2015–16) p. 37.

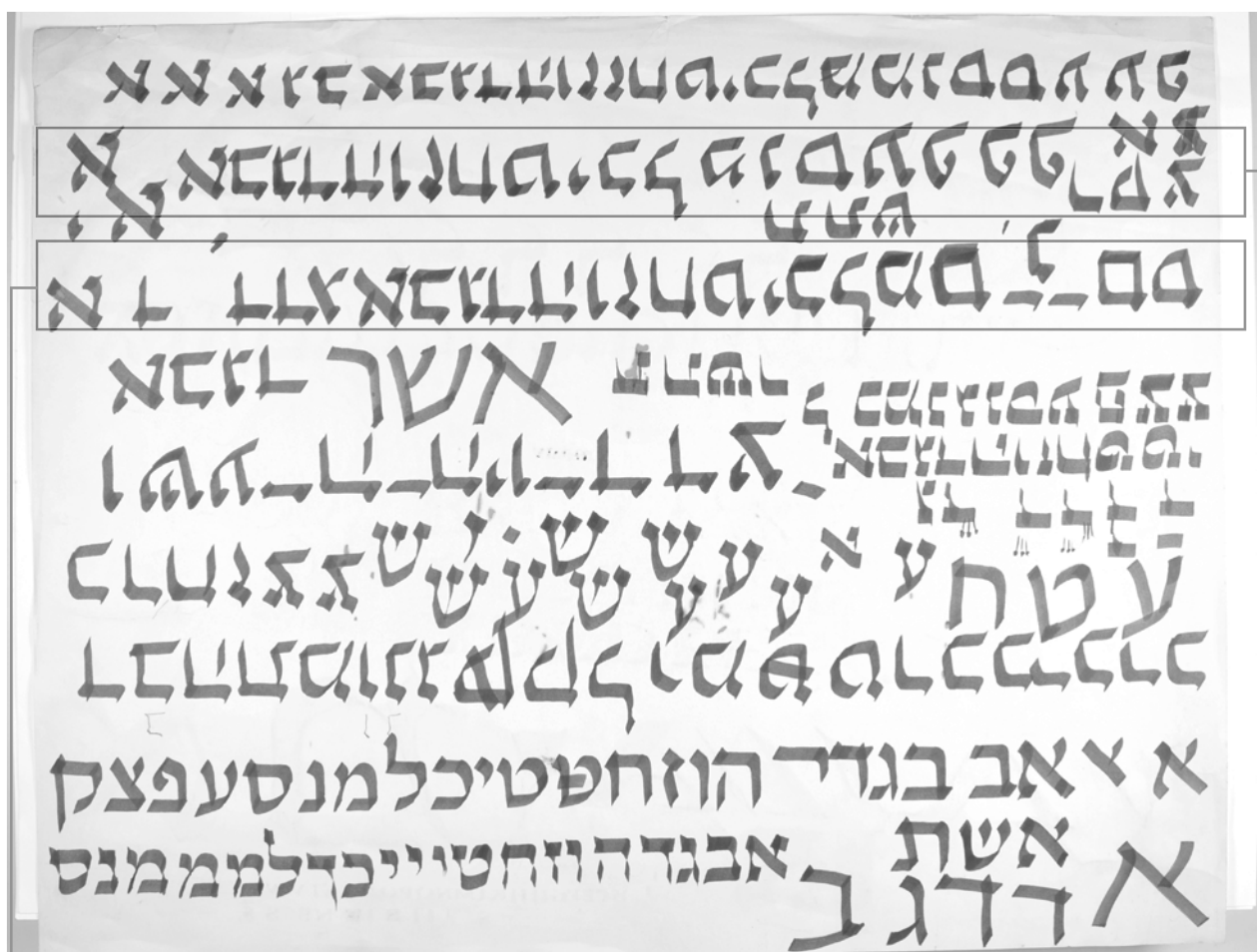


Fig 53 – Top image: The full scribbles sheet, untitled and undated. Bottom image: details of letters from the sheet, compared with the David Hebrew regular in medium weight. Rearranged by the author to show direct comparison between two variations of scribbles from the same source, in comparison with the final typeface drawings. The different treatments of the instrokes are noticeable: the top set has a swing like round and flowing movement, while the set below it has interrupted, short instrokes similarly to the David Hebrew typeface (RIT, rearranged by the author. Scale: 15%).

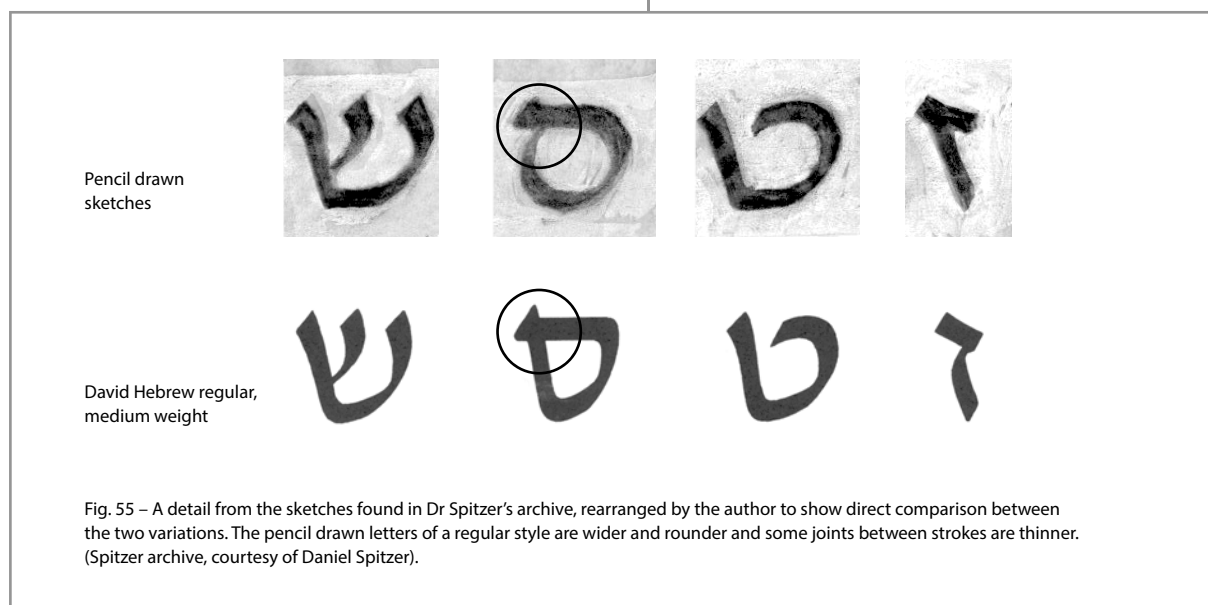
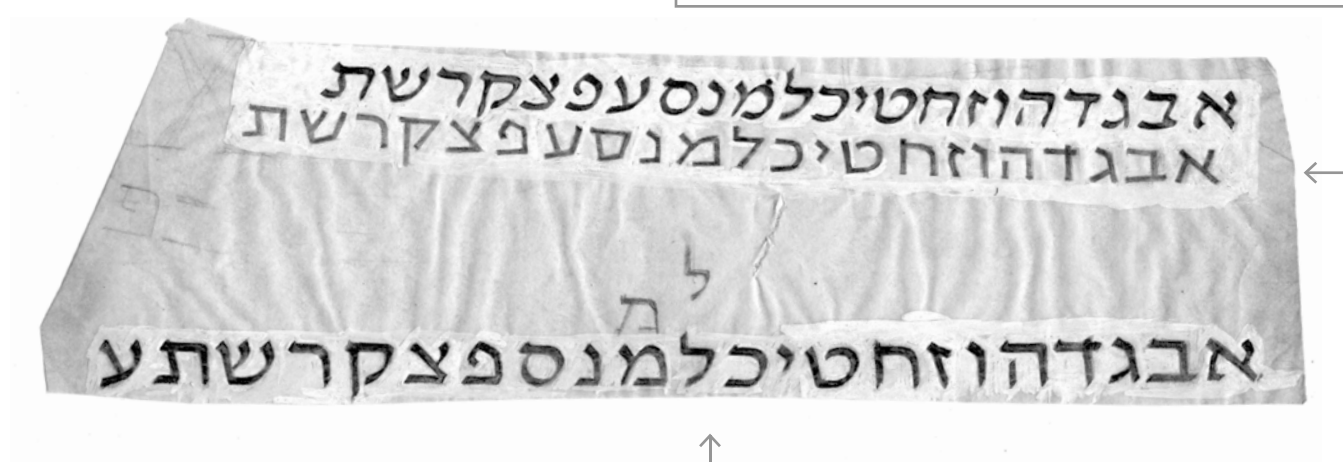
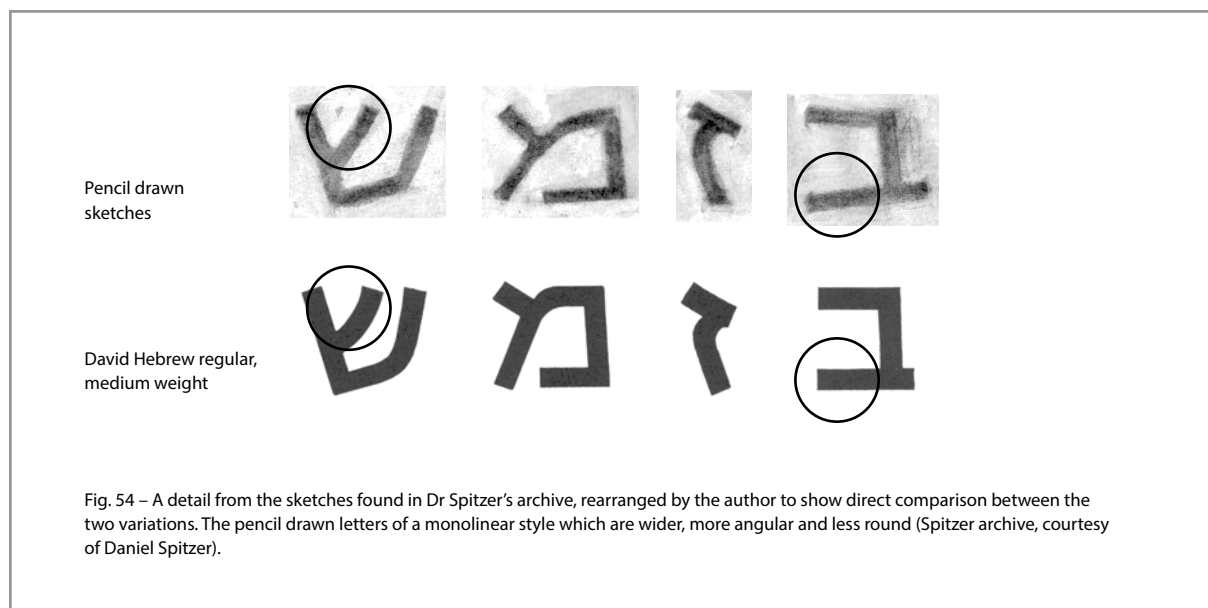


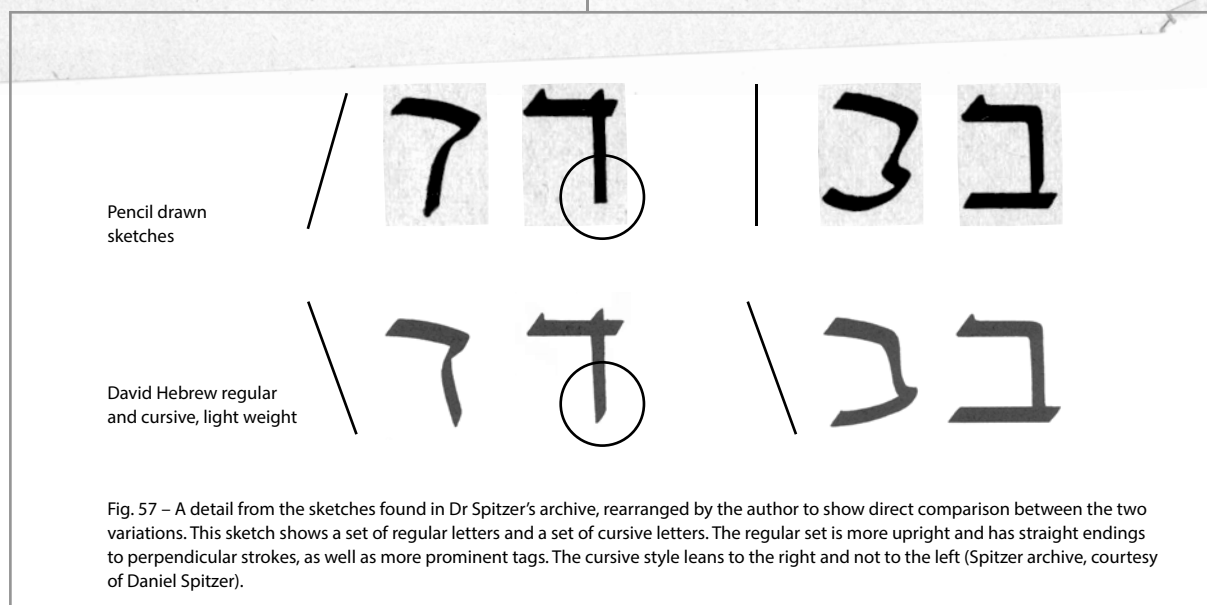
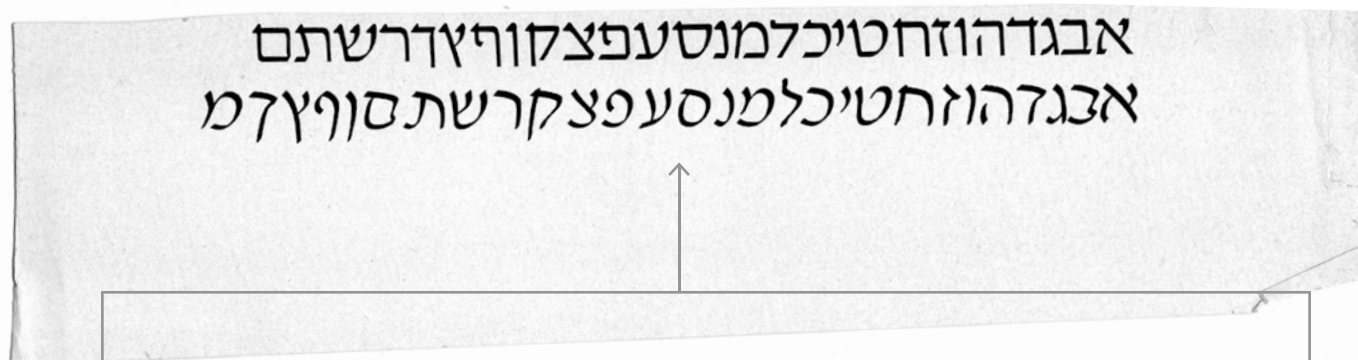
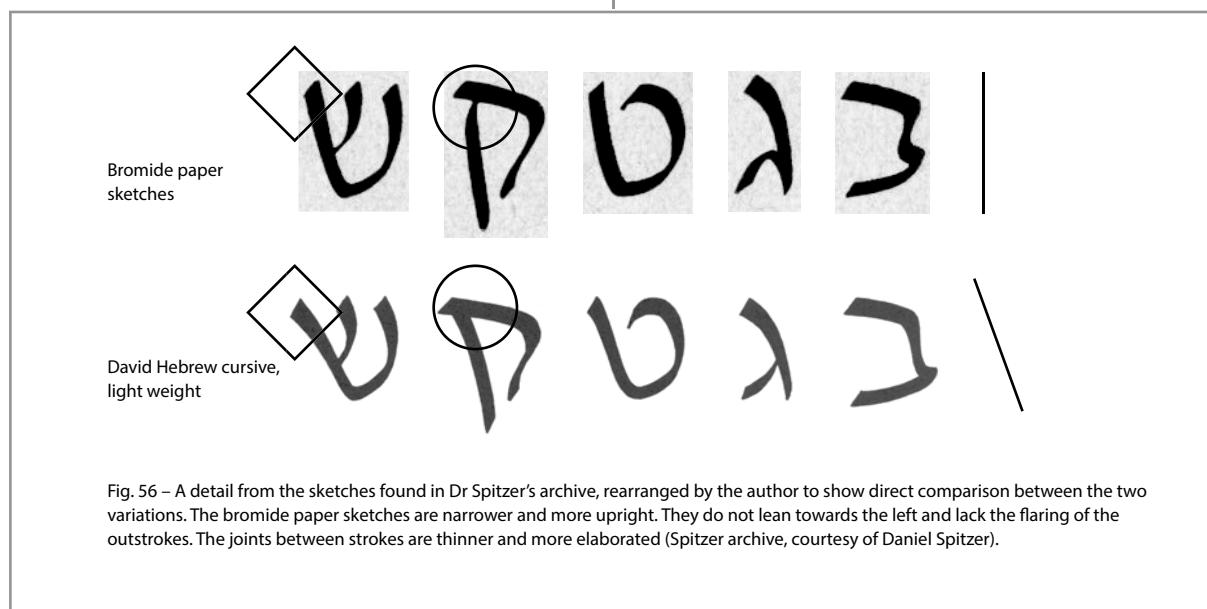
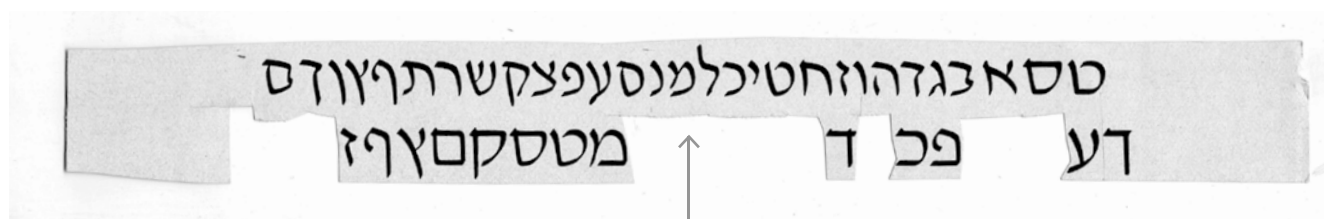
As mentioned earlier, Dr Moshe Spitzer advised Ismar on the design of the David Hebrew typeface. As far as what is known today, no documentation of their correspondence is in existence, apart from some untitled and undated drawings that are kept in Spitzer's archive in Israel. It is believed that Spitzer's consultancy to David was mostly regarding the adjustments needed in order for his calligraphic lettershapes to be suitable for the casting process.<sup>59</sup> Since the sketches are not titled and not dated, it is impossible to reconstruct a linear design process. However, it does show how David inspected and experimented with various design issues and eliminated features that proved to be less suited for the design of the family, both technically and conceptually.

Generally speaking, these sketches show variations in the width of the lettershapes, different stroke appearances, experimentation with the overall level of roundness compared to more square shaped letters, different joints treatment between two strokes, and different angles and direction of inclination. Most sheets had more than one style drawn on them which shows the design process of all styles was done simultaneously. This underlines the unique approach of creating a Hebrew typeface family as one coherent project.

In this visual comparison, each set of letters from the sketches is compared with its matching style and weight from the final drawing of the lettershapes separately. This is done in order to trace and highlight specific details that apply to each style. (Figs. 54–56 overleaf). The last sketch inspected is of the regular and cursive style together, both showing the greatest difference when compared to the final drawing. (Fig. 57 overleaf).

<sup>59</sup> From correspondence with Ada Wardi, August 2016.





אבגדהוזחטיכך-  
 למסנןסעפףצץק  
 רשת0987654321  
 -()«»:;.,!?"'

אבגדהוזחטיכך-  
 למסנןסעפףצץק  
 רשת0987654321  
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אבגדהוזחטיכך-  
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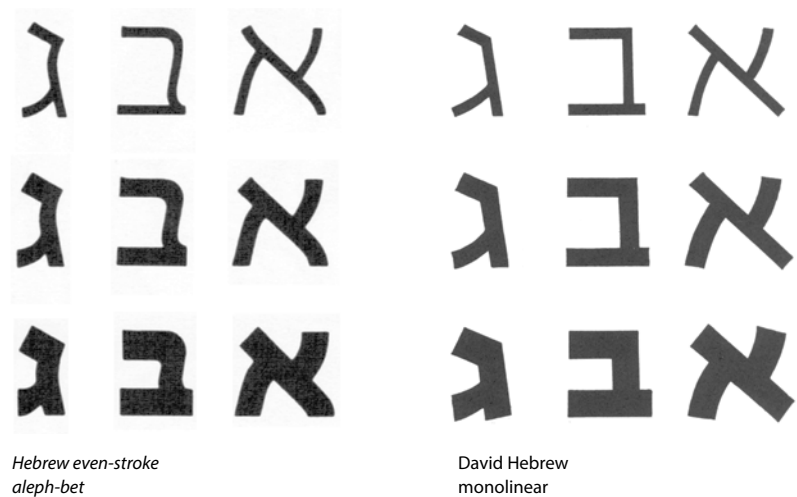
Fig. 58 – The possibly proofed image of the *Hebrew even-stroke aleph-bet* from David's book *The Hebrew letter*. It is a Hebrew character set of four weights that shows similarities to the David Hebrew typeface family (RIT, Scale 100%).

A set of letters and numerals was published in David's calligraphy book *The Hebrew letter* in 1990, under the name *Hebrew even-stroke aleph-bet*. It is a Hebrew character set of four weights that appear as ultralight, light, regular and bold. An image of this design is kept at the RIT archive of Ismar David. By the check mark at the bottom right side of the page and the handwritten '100%' at the top right, it can be deduced that it is a full scaled proof of this design, however, it is undated (Fig. 58).

A comparison of this set with the David Hebrew typeface family final drawing reveals the lettershapes are similar in proportions. It is unknown whether this design was ever part of the David Hebrew typeface family, nevertheless, it is interesting to see the different nuances that give this version a handwritten, soft appearance.

It comes across as a calligraphic version of the monolinear style. Since this version fits within the existing styles and weights of the David Hebrew typeface, it is interesting to speculate whether David ever intended this version to be a style of his typeface family (Fig. 59).

Fig. 59 – Lettershapes from the final monolinear drawing and the ones from the *Hebrew even-stroke aleph-bet* rearranged by the author to show direct comparison between the two. While the proportions are similar, the strokes in the latter version are rounder and the lettershapes appear softer than the final drawing (RIT).



As mentioned earlier, a more modulated version of the David Hebrew regular and cursive styles was proofed by Ismar David and published in 1980. It is a set of dry rub-down transfer sheets produced by Transfertech. Since the production of dry rub-down transfer sheets entails less technical limitations than slug composition, Ismar David manifested here a notion of more pronounced calligraphic details such as the ones seen in his earlier sketches (Fig. 60).

Fig. 60 – Lettershapes of the final regular and cursive styles in light weights versus the dry rub-down transfer version, rearranged by the author to show direct comparison between the two. The latter version is more calligraphic (Yaronimus, 2014).



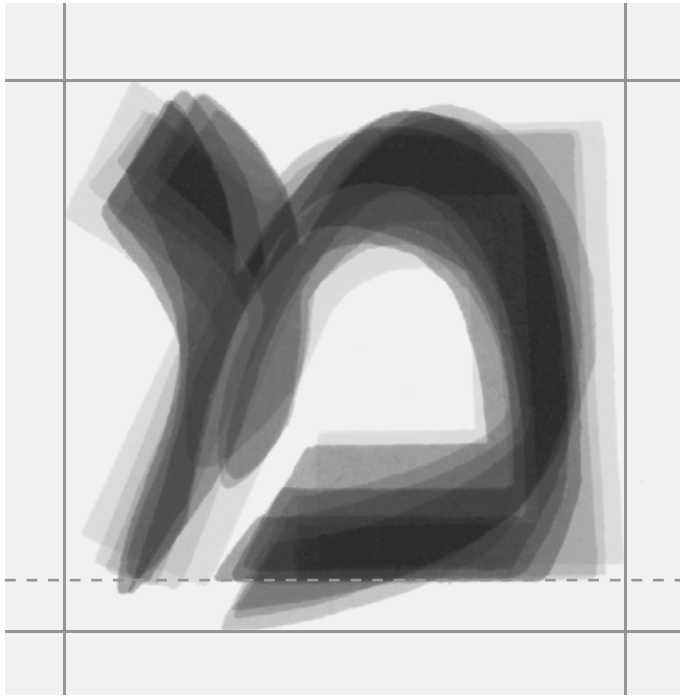


Fig. 61 – An illustration showing the letter Mem in all three styles and all three weights layered on top of one another to fit the same proportions (Brandshaft, 2005, rearranged by the author).



Fig. 62 – An illustration by Ismar David of the proportions of letters, from his calligraphy book *The Hebrew letter*. This follows the same system of width division he used in the David Hebrew typeface (David, 1990).

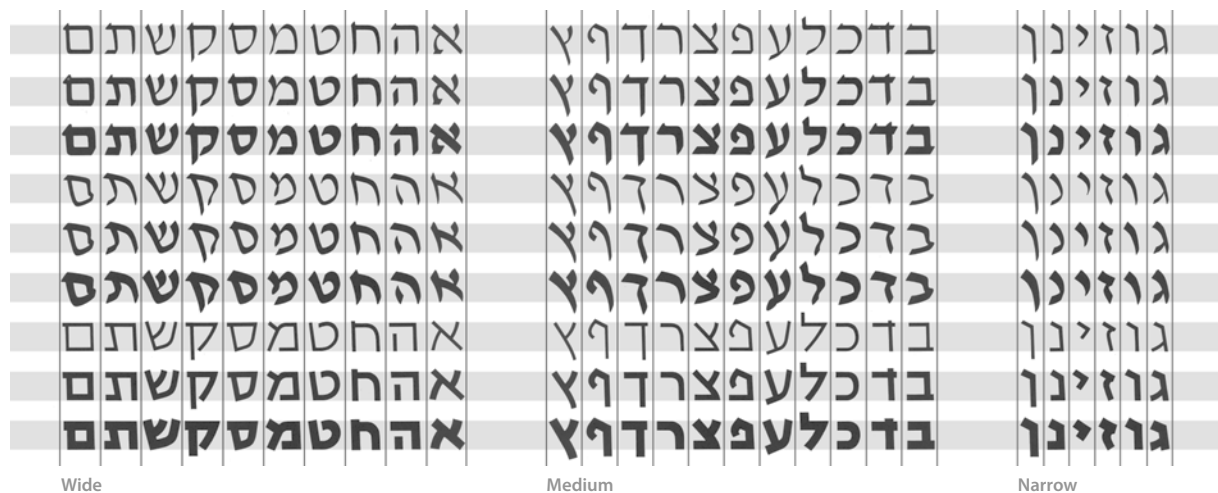


Fig. 63 – All lettershapes of the three styles and weights, on the same baseline and divided into three groups according to their width. (Brandshaft, 2005, rearranged by the author. Scale 30%).

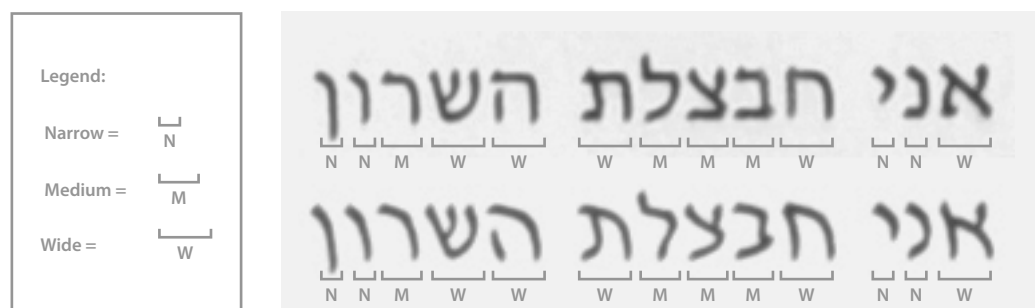


Fig. 64 – Enlarged detail from Fig. 65: the back page of a fourfold promotional leaflet of the Intertype Corporation for the David Hebrew typeface. The three width groups are marked to show they are equal in both styles. (RIT, rearranged by the author).

#### 4.2.3 Technical requirements

Ismar David was familiar with the type production limitations in his new place of residence. Since Monotype was not operating in Palestine at the time, he had planned the David Hebrew typeface for production with the Intertype Corporation, which utilised slug composition.

This meant that each member of the family would have to fit on the same matrix and line up in print on the same baseline: each letter, of each style and each weight. This way the machine operator can select which of the letters will be cast into a single line of type, with the ability to insert letters of different styles and weights (Fig. 61). In order to achieve this fitting David divided the letters into three groups according to their width and the number of strokes they are composed of. The first is a group of narrow letters, the second a group of medium letters, including letters constructed of only one vertical element (or of one vertical element with a very few other elements) and the third, a group of wide letters with two full vertical elements or more (Figs. 62–64).

The printed example of the regular and cursive styles, the only two styles printed under David's supervision, displays that in addition to following the technical requirements, this system brought a high degree of evenness in the texture of the paragraphs and a light page 'colour' (Fig. 65).<sup>60</sup>

60 Brandshaft (2005) p. 65.

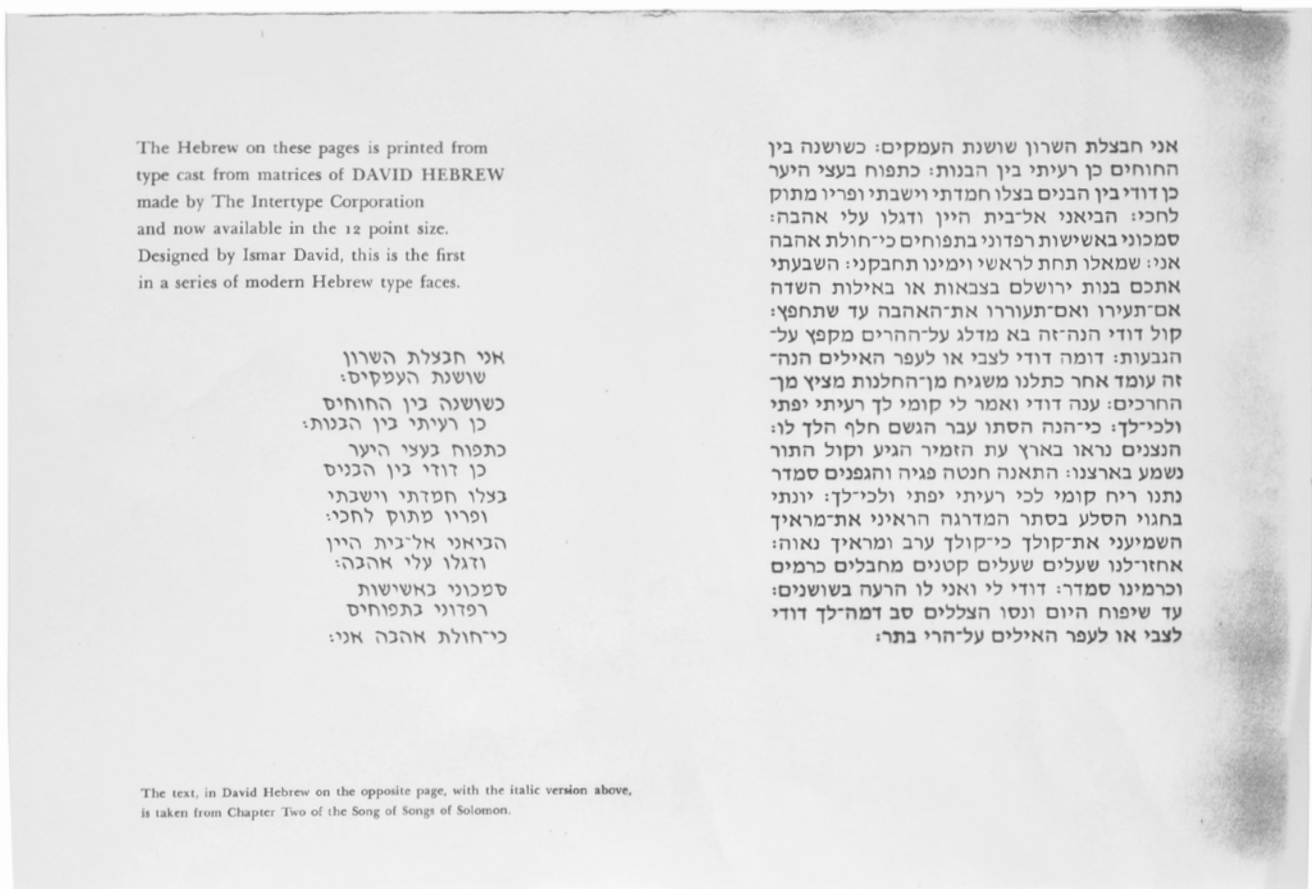
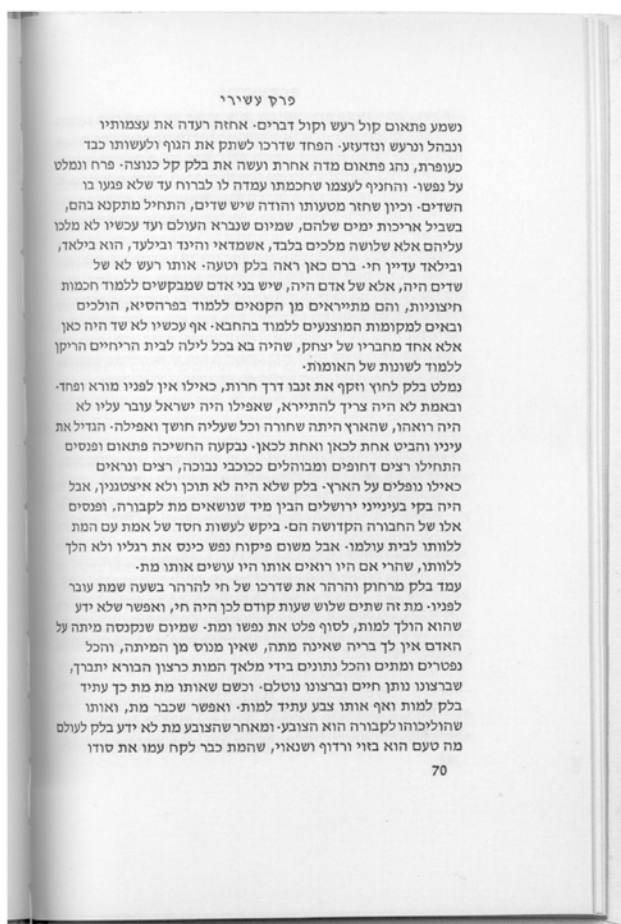
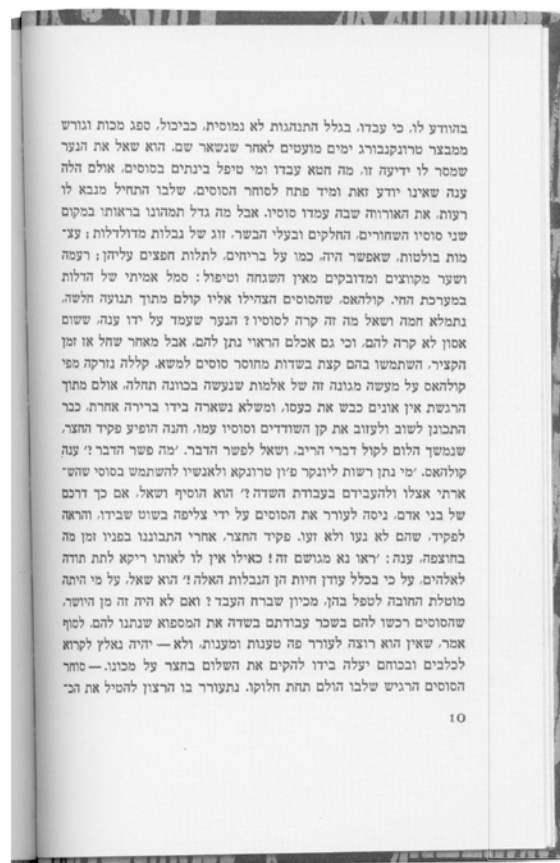


Fig. 65 – Back page of a fourfold promotional leaflet of the Intertype Corporation for the David Hebrew typeface (RIT).



David Hebrew



Frank Rühl

Fig. 66 – A comparison between the 'colour' of the pages in the same letter height. The David Hebrew typeface appears lighter than the Frank Rühl typeface. In this example the text in Frank Rühl is typeset with larger line spacing to compensate for the dark appearance of the page. Left image: a page from Agnon's book *A Stray Dog* (1960) set in the David Hebrew typeface. Right image: a page from the Hebrew translation of the book *Michael Kohlhaas* by Heinrich von Kleist (1953) set in the Frank Rühl typeface (Wardi, 2009–2015. Scale: 30%, 25%).



Fig. 67 – A comparison of Hebrew letters of the David Hebrew regular style with the Frank Rühl regular style. On the left the Frank Rühl letters from the original specimen. On the right the David Hebrew lettershapes from the original drawing. It is noticeable that the David Hebrew lettershapes are significantly wider and have larger counters than the Frank Rühl typeface. (C.F. Rühl, 1910. Brandshaft, 2005, rearranged by the author).





Fig. 68 – The three weights of each style one atop the other (Brandshaft, 2005, rearranged by the author).

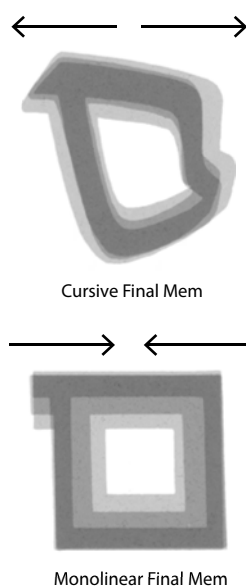


Fig. 69 – The weight in the cursive style tends to expand outwards and not inwards as it tends to do in the regular and monolinear styles. (Brandshaft, 2005, rearranged by the author).

The Israeli typographer Ariel Wardi writes about the David Hebrew typeface set in Agnon's book *A Stray Dog* (published in 1960 as mentioned earlier). He describes how the letters 'colour' the page differently compared to other Hebrew printed pages that usually appear dark, and how the David Hebrew typeface made the page look lighter and more similar to a page set with Latin typefaces (Fig. 66).<sup>61</sup> Additional features of the David Hebrew typeface that contribute to the clarity of the lettershapes when set on a printed page, and originated partly from technical aspects of production, are the large counters and open apertures. When comparing lettershapes of the David Hebrew typeface with the popularly used Frank Rühl typeface, it is noticeable how the David Hebrew typeface has considerably wider proportions which allow for the larger counters (Fig. 67).

#### 4.2.4 Comparison of weights across styles

The process of adding weight to each style is more of a technical challenge rather than a conceptual one. In this case, David's additional weights came as part of his vision to enable every printer in Israel to produce well structured and well organised printing for books and commerce, aesthetically comparable with the Latin typography. Therefore he provided a variety of weights and expanded the range of the typographic alternatives.<sup>62</sup>

Considering the technical aspects of slug composition and the fact that each lettershape across the three weights of each style had to fit in a specified space and on a shared baseline, while maintaining a large open counter poses a great challenge for the type designer. Laying the three weights of each style one atop the other aids in tracing the different treatments of thickening the strokes in each variation (Fig. 68).

Generally speaking, it seems that the increase of the weights occurs in all directions, retaining the slightly heavier weight in the horizontal strokes. The increase in weight from the light versions to the medium versions is less dramatic than the one occurring on the shift from the medium versions to the bold versions. In some cases, changes in the structure of the letters are noticeable, such as the shortening of the length of the strokes. Another issue that stands out is that the weight in the cursive style tends to expand outwards and not inwards as it tends to do in the regular and monolinear styles. This design choice is effective in maintaining the large counters in the more elaborate style that has more complex structure and smaller counters (Fig. 69).

Ismar David was successful in creating this range of high performance weights at a time when this concept did not exist in Hebrew typography. Unfortunately, it was only in 2012 that all weights were released together as members of one comprehensive digital family: Monotype's David Hadash.

<sup>61</sup> Wardi (2009–2015) p. 251.

<sup>62</sup> Brandshaft (2005) p. 67.

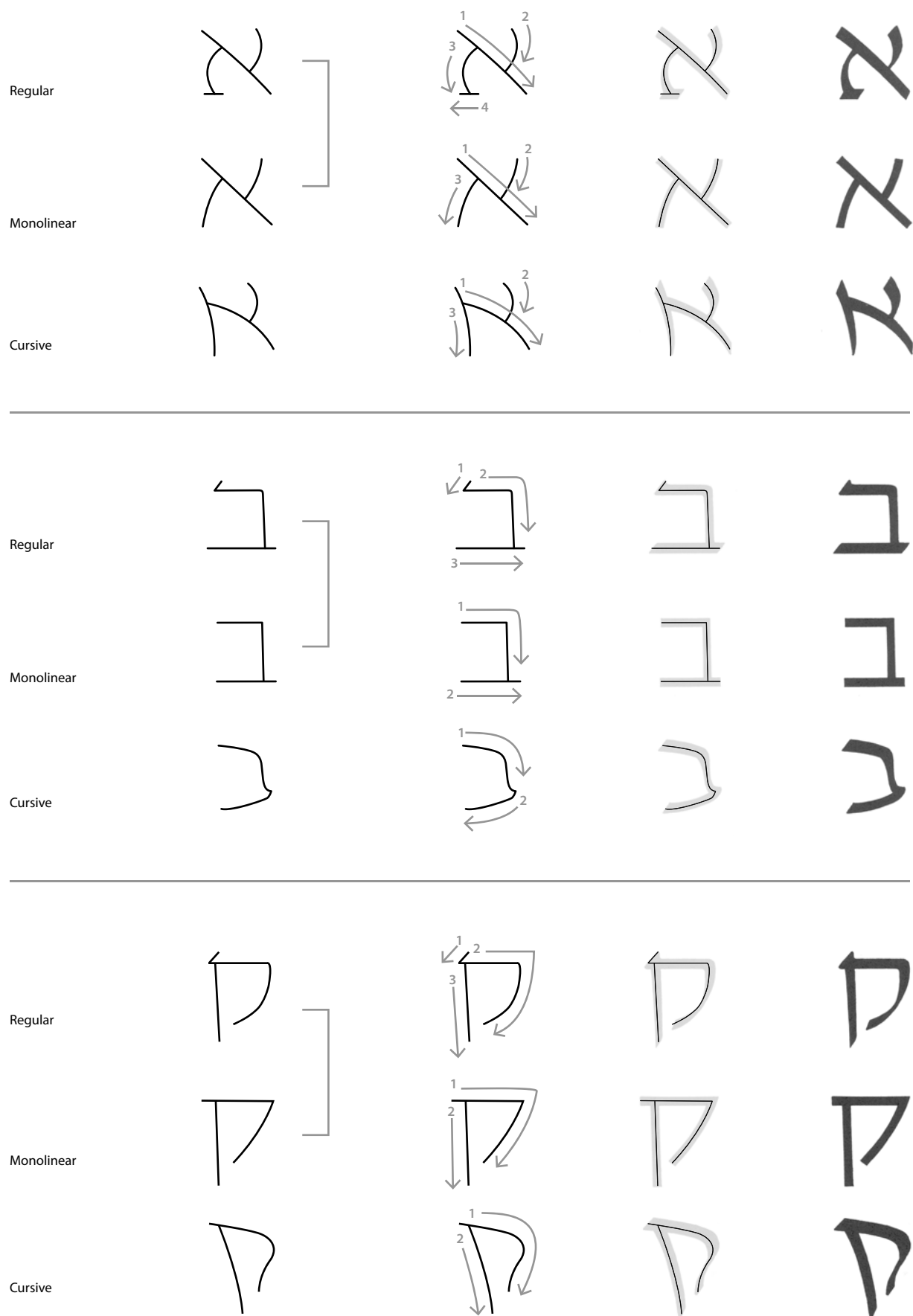


Fig. 70 – When comparing the three skeletons and ductus of the of the three styles it is noticeable that the regular style and the monolinear style share many similarities, while the cursive style is different (Brandshaft, 2005, rearranged by the author).

#### 4.2.5 The Relationship between the styles

Regarding each style of the David Hebrew typeface family as a set of lettershapes belonging to one collection, this segment of the analysis is focused on revealing the connections between these three collections. The comparison between the three styles is conducted in order to provide a more profound understanding of how closely the styles are related to one another and how consistent they are.

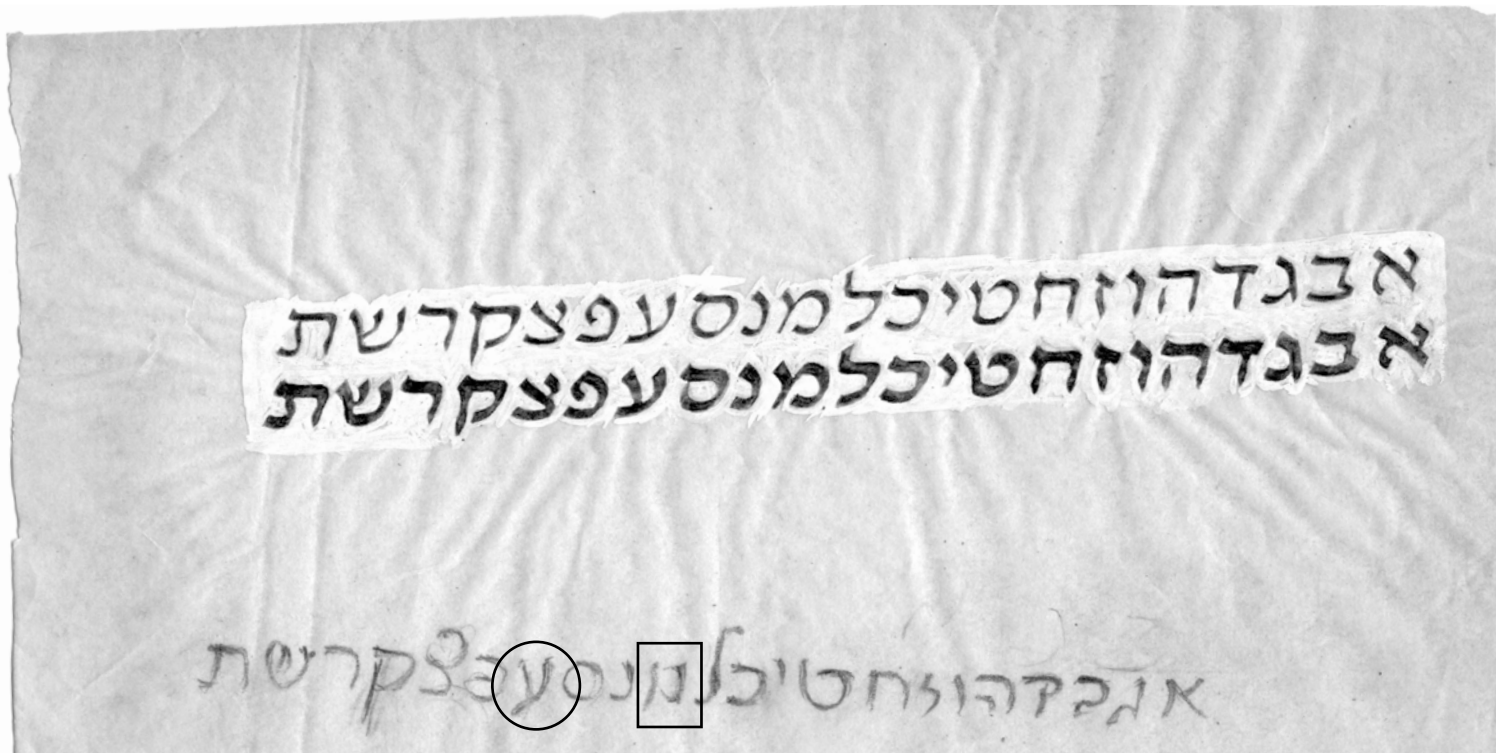
The study of the lettershapes' structure is done by the extraction of their skeleton: the line that marks the centre of each stroke and describes the movement it makes. Since David stated he based the structure of the lettershapes on old Semitic forms that were handwritten, the following stage is the inspection of the skeletons next to the Hebrew letter ductus: in this case referring to the number of strokes, the direction and the sequence in which they are commonly written by native users of the Hebrew language.

##### Three different structures

While keeping the same proportions, each style follows different forms. However, when comparing the three skeletons the similarities between the regular style and the monolinear style are evident. The skeleton of the cursive style stands out in comparison and presents a greater amount of differences (Fig. 70). Particularly, the monolinear style follows a constructed, mechanical form, reminiscent of early Hebrew inscriptions and mosaics. Although the skeleton of this style closely resembles the skeleton of the regular style, it is constructed in a more geometric manner, keeping the slight angle to the left (Fig 71).



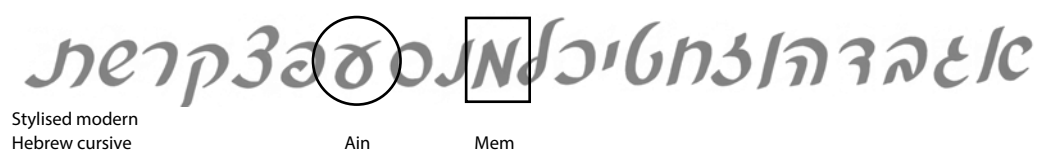
Fig. 71 – The monolinear style is reminiscent of early Hebrew inscriptions and mosaics. These sources were probably used by David as references. Left image: Rehov inscription of a religious law on the mosaic pavement in Beit She'an synagogue. The skeleton of the letter Kuf compared with the letter extracted from the mosaic. Right image: a burial inscription from Beit She'arim. The skeleton of the letters Shin and Lamed compared with the letters extracted from the inscription (Yardeni, 1997. Wardi 2015–16, rearranged by the author).



Pencil drawn sketch

Ain

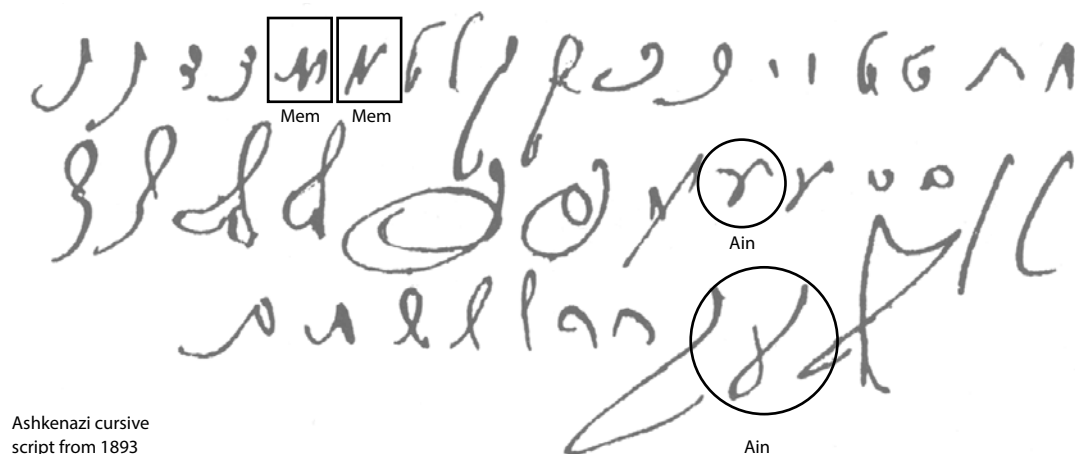
Mem



Stylised modern  
Hebrew cursive

Ain

Mem



Ashkenazi cursive  
script from 1893

Ain

Ain

Fig 72 – Top image: the pencil drawn set of letters found in Spitzer's archive. The letter Ain is marked with a circle, the letter Mem is marked with a rectangle. Centre image: stylised modern Hebrew cursive letterforms based on the Ashkenazi cursive script, rearranged by the author to show direct comparison. Bottom image: Ashkenazi cursive letterforms extracted from a *Ketubah* (Traditional Jewish prenuptial agreement) from Germany, 1893 (Spitzer archive, courtesy of Daniel Spitzer. Yardeni, 1997).

The cursive style seems to be a mix between a typographic skeleton and contemporary handwriting structures, introducing innovative hybrid shapes that are both recognisable to the reader and highly distinguished from the regular style. From the sketches found in Spitzer's archive, a pencil drawn set of letters affirms David's familiarity and experimentation with a handwritten informal style that resembles the Ashkenazi cursive style used in Europe in the eighteenth and nineteenth centuries, but also mirrors the manner in which native Hebrew speakers are taught to write today. The fusion between the regular typographic style and the movement of the hand in contemporary handwriting could be the origin of the unique loop like shape in the letter Mem and the letter Ain (Figs. 72–73).

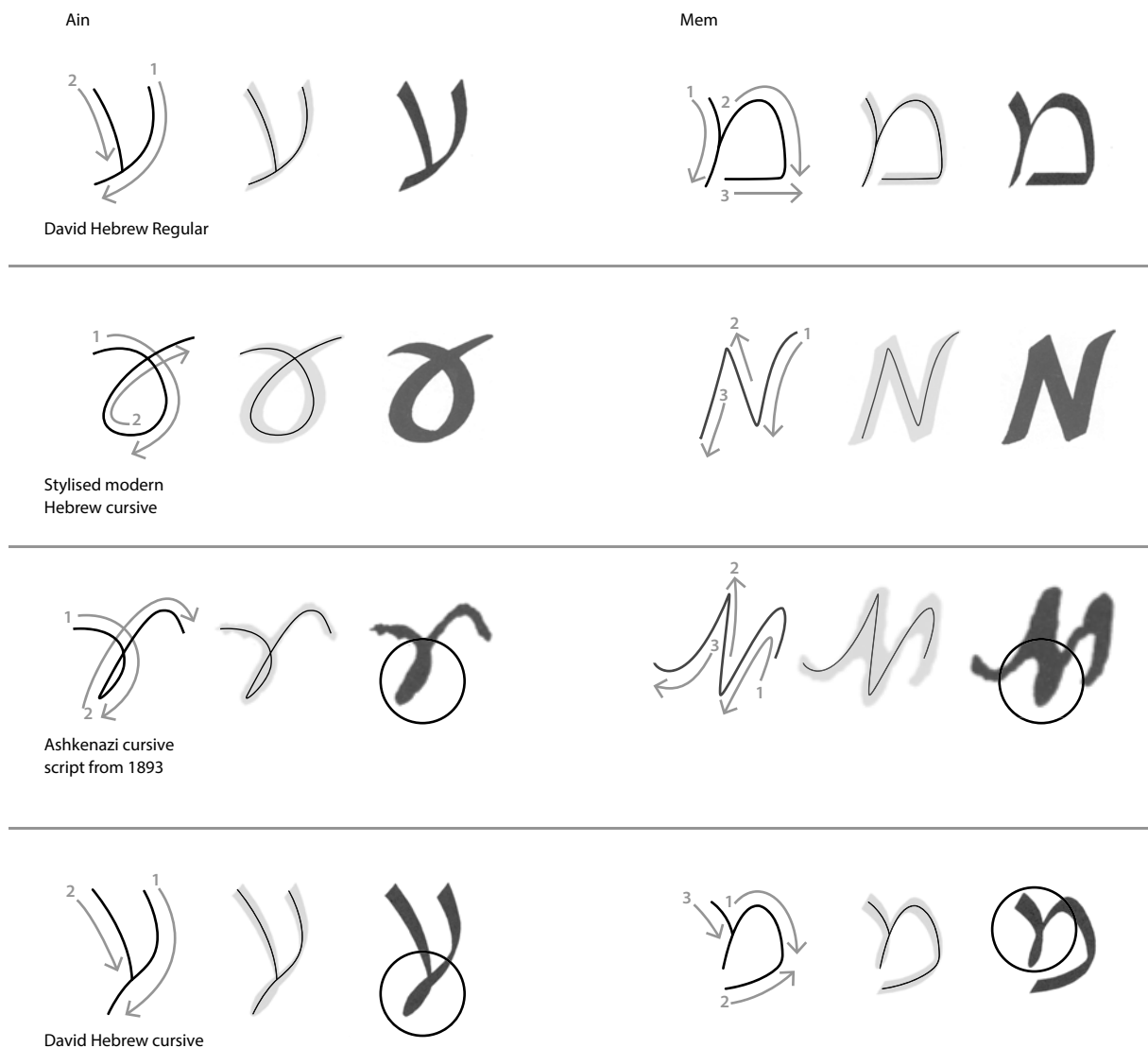


Fig. 73 – The letters Ain and Shin present a unique loop like shape. This shape might have originated from the movement of the hand in contemporary handwriting structures fused with the structure of the regular style. Top image: skeletons and ductus of the David Hebrew Regular. Second from the top image: skeletons and ductus of the stylised modern Hebrew cursives. Third from the top: skeletons and ductus of the stylised modern Hebrew cursive. Bottom image: skeletons and ductus of the David Hebrew cursive (Yardeni, 1997, rearranged by the author).

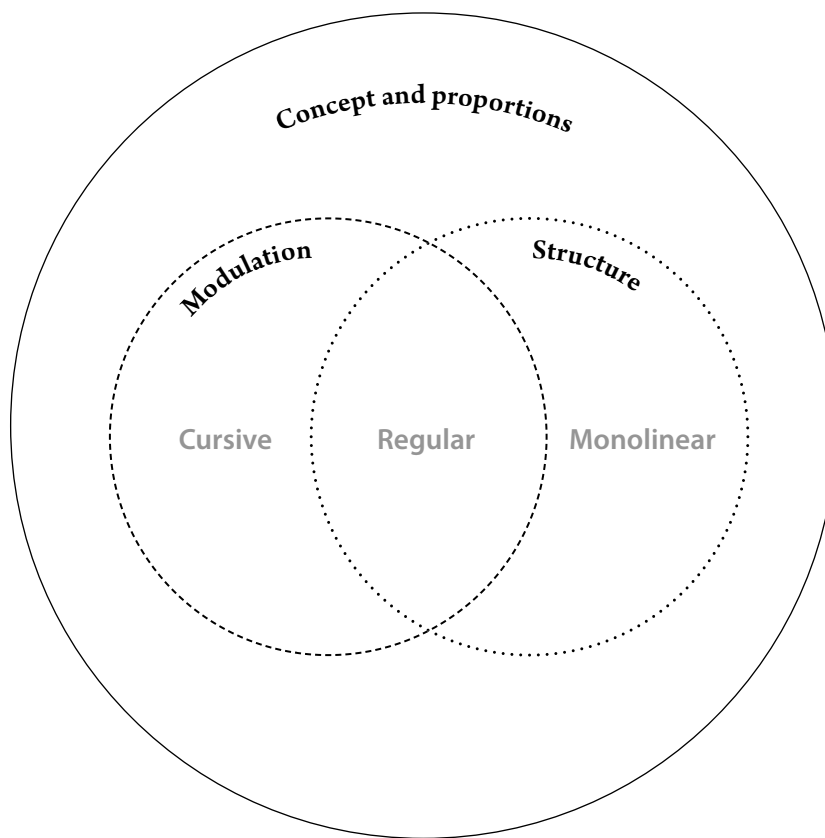


Fig. 74 – All three styles are strongly bound together technically by the same proportions and atmospherically by the same concept, while the cursive and regular styles share a common modulation and the regular and monolinear share a common structure (Illustration by the author).

### **The connections between the styles**

The three styles evidently do not equally share all features and characteristics. Looking into the connection between pairs of styles aids in this understanding. This examination brought up three themes that define the connections between the styles.

#### **Modulation**

The regular and the cursive styles share an ‘imaginary tool’ that echoes the broad nib pen. The monolinear style appearance of strokes is different and is not based on a notion that follows the broad nib pen.

#### **Structure**

The regular and the monolinear styles share a very close skeleton. The cursive style stands out with a different structure.

#### **Proportions**

All styles share the same proportions.

#### **Concept**

All styles emerged from the same concept of following the original forms of early Hebrew lettershapes created in the Middle East.

An overall conclusion can be drawn that all three styles are strongly bound together by two aspects. On the one hand, they share the same proportions, a result of a technical process. On the other, they were all conceived with a similar design approach of reflecting the origin of the Hebrew lettershapes (Fig. 74).

According to this analysis, these two aspects are the core of the relationship between the styles, and although each style is treated in a different manner and has different expressive qualities, accommodating different typographic needs, this relationship allows them all to function well together and be considered as parts of the same system.





## 5 Conclusion

This dissertation followed the story of the ground-breaking design of the David Hebrew typeface family. Its creator, Ismar David, was the first type designer to engage with this challenging task. He successfully produced a typographic richness that did not exist earlier and did so despite the limitations of the Hebrew script and the destitute conditions in Jerusalem at that time.

With the declaration of Israel as a state, the David Hebrew typeface answered the great demand for new Hebrew typefaces to support the increasing production of Hebrew texts. It gained great popularity with its release, providing a solution offering both a high technical performance and relevant atmospheric values.

Unfortunately, over the years its popularity declined and its innovative features never became conventional in Hebrew typography. The suggested reasons for this sad turn of events shows how social forces can undermine typographic achievements. Since typography is never isolated from a cultural fabric, the existence of a masterfully crafted typographic tool that could greatly improve the Hebrew reading experience does not necessary imply its utilisation.

In his book *The Hebrew letter* Ismar David writes that “[...] an alphabet could only develop in an atmosphere free from commitments to tradition”<sup>63</sup> and that “[...] changes will continue to occur as long as the use of an alphabet remains vital within the culture”.<sup>64</sup> This freedom from commitments to tradition that David describes is by no means the detachment or the elimination of it. On the contrary, it suggests its application in a way that will keep it alive and relevant. It describes a dynamic process that holds great respect for tradition, however, will not allow it to arrest development, but rather encourage flexibility, in order for it to accommodate for new needs.

With this approach, Ismar David shows that introducing innovation and improvement is possible, despite limiting conditions and scarce resources. The fact that David succeeded in creating a comprehensive typeface family of high quality, for a script that has suffered centuries of stagnation and underwent an accelerated unnatural revival process, proves that with considerable amounts of research and insight it is possible to overcome typographic constraints.

The Hebrew ‘alphabet’, as David refers to it, is indeed central to contemporary Israeli culture and to the professional fields of Hebrew typography and type design, which are slowly evolving. Applying David’s approach and taking inspiration from his vision and work can be beneficial to Hebrew typeface design and add a significant value for both designers and readers of Hebrew type.

<sup>63</sup> David (1990) p. 17.

<sup>64</sup> Ibid. p. 23.



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Fig. 74 – Illustration made by the author.

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Some of the books and articles used in this dissertation are in Hebrew and are marked [Heb]. Their titles and bibliographic data were translated by the author.

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## Acknowledgements

The author would like to express her gratitude to:

Paul Luna, Gerry Leonidas, Fiona Ross, all staff members of the Department of Typography, University of Reading and the MATD class of 2015–16. Special thanks to Katharina Seidl, Kostas Bartsokas and Pria Ravichandran.

The Cary collection, Amelia Hugill-Fontanel, Helen Brandshaft.

Liron Lavi Turkenich, Ada Wardi, Yaronimus, Shmuel Sela and Misha Beletsky.



**David Hebrew. The first multi-style Hebrew typeface family by Ismar David.**  
Shani Avni. University of Reading, 2016.