Faculty and Staff Publications

Summer 8-2017

Typography and the Evolution of Hebrew Alphabetic Script: Writing Method of the Sofer

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Recommended Citation

Main Document

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Writing Method of the Sofer

Abstract:

Typography is the study of language letterforms, phonographic alphabetic characters that, when combined with additional characters, form words and/or sentences to express an idea and communicate a message to an audience.i The history of typographic design dates back to early civilization and the invention of alphabetic writing systems, formulated and processed through the literary skills of the Hebrew Scribe Ezra whose knowledge and practice offered a significant contribution within a predominantly oral society. By examining the history of Hebrew typography through the discourse of biblical writing systems and alphabetic design, the article addresses the development of Hebrew scripts evolving from original laws of the Torah and external influences such as exile and displacement. The article further investigates the history, practice, and contributions of the Soferim, who, from the time of the Babylonian exile, transcribed the writing of sacred texts using a strict method of design, as stated in Jewish law. By examining the scribal processes, a comparison is made between ancient and contemporary typographic principles and design.

Keywords: Typography, Design History, Design Culture, Hebrew Script, Scribal Art

History: Alphabets/Hebrew

As language in visual form, typography developed historically through the evolution of early civilization writing systems, including prehistoric pictographs and cave paintings. Prior to the invention of the twenty-two-character alphabet (c. 1300 BCE), which the Phoenicians are credited with, the two major systems of writing were Hieroglyph, originating in Egypt, and Cuneiform, developed in Mesopotamia. As a pictographic alphabet, Hieroglyph consisted of over seven-hundred-character symbols, each representing a thing, idea, or sound. The pictograms could be written vertical or horizontal in either direction and were read according to the position in which the character faced. Cuneiform, invented in Mesopotamia, was a writing system in which a linear symbol, representing an idea or sound, was pressed into a soft clay slab by using the edge of a stylus. Consisting of hundreds of linear shapes, Cuneiform was initially written top-down using columns, but with time came to be written in rows from left to right.[ii]

Until recently, archaeological findings have recognized the Phoenician civilization as the originators of the twenty-two-character alphabet in 1300 BCE. Written from right to left with no spacing between words, each letter represented a sound in which, by placing the character next to one another, formed a word and/or group of words communicating an action, idea, or thing. The simplicity in the writing system was revolutionary, as for the first time only, a limited selection of symbols was needed in conveying a concept, eliminating the necessity for complex pictographic messaging that was extensive to write and complex to read. The progressive

capabilities and popularity of the Phoenician alphabet quickly spread throughout the Middle East and Mediterranean region, influencing the formation of the Semitic and Greek alphabets.

In Jewish tradition, it is believed that the Hebrew letters were the element that Hashem used to create the world, and each letterform is shaped with a purpose and meaning to its design. This theory is attributed to the belief that the Hebrew "alphabet is considered eternal, pre-existent to the Earth, and the letters are seen as having holiness and power…"[iii] Prior to the Babylonian exile, Jewish civilization produced religious texts using a Hebrew script termed Paleo-Hebrew (900 BCE), an alphabet consisting of twenty-two letters written from right to left with diacritical markings to indicate a vowel sound.[iv] The design of the Paleo-Hebrew letterforms and the syntax of the writing structure was significantly similar to that of the Phoenician alphabet. However, while the script was used in ancient Israel and Judah until the fall of the first temple and the exile of the Kingdom of Judah in the sixth century BCE, its use decreased when Jewish scribes residing in Babylonian captivity adapted to the local Aramaic writing system, creating *Ashuri*, also known as Assyrian script, a Hebrew script juxtaposing the sharp, linear Paleo-Hebrew letterforms, with the soft, rounded shape indicative of Aramaic letterforms. The Samaritan population who remained in the land of Israel, never having been exiled from the land, has preserved the Paleo-Hebrew alphabet and writing system from early civilization to present.

Having spread throughout the Assyrian and Persian Empires, Aramaic influenced the progression of Semitic languages in visual context.[v] The Hebrew alphabetic script evolved when

Jewish scribes residing in Babylon during the first exile recognized the ease and fluidity the Aramaic writing style offered in comparison to the rigid linear shape of the Paleo-Hebrew letters. Ashuri, Assyrian script, combined Paleo-Hebrew and Aramaic (1000 BCE) letterforms, by which the characters presented a balance in line contrast and linear style. The square, block scripting style offered a smoother line, faster to write and easier to read and was used in the writing of most Judaic texts during the exile and thereafter.

After the destruction of the second temple, the Jewish people dispersed from Israel, not to return until the twentieth century. The Hebrew language and alphabet was kept sacred to the Jewish population within the diaspora and continued to be used for religious purposes. Jewish scholars and intellectuals remained fluent in Hebrew and most Jews within the diaspora were educated in reading and writing the alphabet for the purpose of reciting prayers. For daily life, the majority of Jewish communities assimilated to their surrounding local languages, developing dialects and writing scripts by code-mixing Hebrew with the local language: the Ashkenazi (Eastern European) spoke Yiddish, a fusion of German and Hebrew; the Sephardi (Iberian Peninsula) spoke Ladino, a combination of Spanish and Hebrew; the Mizrahi (North Africa and Middle East) spoke a blended code-mixing of Hebrew, Arabic, and Spanish.

The evolution of the Hebrew spoken and written language remained relatively dormant for two millennia, until the nineteenth century with the Haskalah, or Jewish Enlightenment, and the rise in Zionism. "When Zionism warmed up to the idea of speaking Hebrew, the idea was wrapped into a heroic story of an ancient language."[vi] When Jewish immigrants began returning to the

land of Eretz Israel in the late nineteenth century, they were persuaded to represent Jewish identity by removing the language of their exiled state and taking on the language of the Jewish people, Hebrew.

Ezra the Scribe; Sofer, Torah, Exile, Return

According to Jewish belief, Moses was gifted the Torah, Jewish law, by G-d in two parts; the Written Torah (*Torah SheBiKetav*) and the Oral Torah (*Torah SheB'Al Peh).* Known as Chumash, the written Torah details the "Five Books of Moses" and was created using coded text comprised of summarized shorthanded narratives. "G-d gave us the Written Torah with cryptic hints, while their elucidation is in the Oral Torah."[vii] Judaism accepts the idea that Moses initially carved the Written Torah onto stone at Mount Sinai. Later, he transcribed the text on parchment while traveling through the desert. Prior to his death, Moses copied thirteen Torah scrolls, twelve of which were distributed to each of the Twelve Tribes of Israel. The thirteenth scroll was placed in the Ark of the Covenant then later transferred to the Holy of Holies in the Temple as the official standard for future Torah transcription.[viii]

Offering descriptive reasoning layered within the symbolic narrative of the Written Torah, the Oral Torah, or Torah *SheB'Al Peh*, was traditionally passed verbally from teacher to student through theory and discourse. "The Oral Torah is the tradition of how to correctly understand the meaning of the Torah. Without it, the Torah would be non functional."[ix] Initially forbidden to transcribe, after the destruction of the Second Temple in 70 CE and the exile of the Jews from Israel for centuries, Jewish scholarly leaders identified the necessity of documenting the

theories of the literary context and began compiling the Oral Torah into a written context,

producing the Mishnah, Talmud, and Midrashim.

The First Temple, built by King Solomon in the Old City of Jerusalem, was completed in 955 BCE.

It was here that the Written Torah was kept and overseen by the men of the Levite Tribe until

the temple was destroyed (in 586 BCE) when King Nebuchadnezzar of Babylon conquered

Israel. After destroying the temple, Nebuchadnezzar sent the majority of Jewish elite, including

governmental officials, religious leaders, and educated scholars, into exile in Babylon, where as

local captives the people were easier to monitor. Fifty years later in 538 BCE, the Babylonian

rule of Israel ended when King Cyrus of Persia overthrew Babylon. While much of the Jewish

population living in the Babylonian exile since the fall of the First Temple chose to return to

Jerusalem, there were many who remained, having established themselves within the local

culture.

The second exodus from Babylon occurred approximately one hundred years later in 458 BCE,

when Ezra the Scribe, under the direction of Persian King Artaxerxes, who wished for a

restoration of Jewish practice in Jerusalem, led nearly 1,600 men, women, and children to

Israel.[x] Ezra and his followers arrived in Jerusalem to find the Temple, while having been rebuilt,

smaller and less glorified. The majority of the remaining Jewish population had assimilated to

the ruling, neighboring polytheistic cultures, resulting in a significant reduction in Jewish study

and practice. Having been sent by the Persian King to reestablish Judaism in Jerusalem, Ezra

held a high position as leader and authority, with the power to appoint judiciary and government officials and punish those who did not adhere to Jewish law.

Ezra the Scribe was born and raised in Babylon, receiving an education in the Torah while in exile. Having achieved a level of knowledge and skill, Ezra was a leader within the community who, through his work, gained respect and notoriety from his people and the ruling classes. Recognizing that there was a legitimate concern regarding the loss of Judaism, Ezra sought to edify the Jewish population of Jerusalem in their history and laws. As a scribe, Ezra was a scholar and teacher fluent in reading and writing, making him valuable in a predominantly illiterate, oral society. He sought to achieve his goal of preserving the presence of the Jewish monotheistic tradition through education, which required that he establish a unit of men similar to himself; those who studied the Torah, followed Jewish law, were educated in reading, and skilled in writing. Known for their contributions in literacy, scholarship, and ethics, the Men of the Great Assembly were Soferim (sing. Sofer) scribes, capable of reading, writing, documenting, and teaching sacred text. Many descendants of the Levite Tribe, the Soferim, held an elite social standing, attributed to their knowledge and skills.[xi] A "special class of learned scribes who were responsible for the production of biblical texts and their final editing,"[xii] the Men of the Great Assembly worked as a collective to transcribe the Torah, eventually finalizing and announcing the confirmed canon on the 1st of Tisrei, 444 BCE.

The significance of Ezra the Scribe was paramount to the survival of Judaism; had it not been for his contribution in educating the Jewish population of Jerusalem, it can be assumed that the

religion would have vanished through the people's assimilation within a polytheistic society.

The work of Soferim afforded the reproduction of texts through a copyist method, allowing for traditional Jewish laws and ideologies to be archived and taught within the Jewish population of Jerusalem. Scribes such as Ezra impacted history through education: reading the Torah aloud to the public, developing schools for Torah study and discussion, and writing in an atmosphere where very few were skilled. Thus, by the end of the Persian rule of Jerusalem, most of the Jewish population was educated in the laws of the Torah and reinstated in the practice of Judaism. "The scribes encouraged knowledge; they strengthened personal character; they created literature; they formulated laws. They derived from the sacred books those ideas which were to guide their own people and, in time, inspire others."[xiii] Eventually, a reformation took place in which the Scribes, Soferim, having acquired notoriety in their academic and scholarly pursuit in Jewish law and practice, became the leaders of Israel, replacing the high status of the Kings and Prophets.

Sofer/Typography

In the study of typography, the anatomy of a letterform is broken down into separate parts. When developing typefaces, a designer may concentrate on a specific part to form, analyze, and adjust the character. Similarly, in the practice of the Soferim, when writing a letter, each line and point is formed through connecting segments. For example, when writing the letter Dalet, "Its roof and its leg must be short…the leg should be straight, incline towards the right and have a (little) tag on the head of the roof on the left…one must be careful to make it (roof)

square…and (the roof) should have a substantial heel…"[xiv] In Judaism, it is believed that each letter of the Hebrew alphabet represents a concept beyond the surface form. For instance, Aleph, the first letter of the Hebrew alphabet, makes the sound "ah" and signifies the idea of master, creator, teacher. In Hebrew, each letterform is structured through an attachment of multiple characters in which the culmination of shapes produces a numerical value. Aleph, is a design of one Vav and two Yud's equaling the number twenty-six.

Academics distinguish differences in Ashkenazi, Sephardi, Chabad (Lubavitch), and Mizrahi Hebrew script, and the same laws apply to each community in the formation of letters and transcription of holy documents. Using the Ashuri, Assyrian Hebrew script, each letter character of the text must be written to perfection so that the letter's meaning beyond the banal is presented to the reader. Should a letter be written out of order or should a slight mark in writing result in a letter being confused for another, the text is deemed unholy and cannot be used.[xv] The ultimate challenge for the Soferim, then, is the development of the texts while remaining within halakhic practice.

As scholars and scribes skilled in the writing and reproduction of sacred texts, the Levite, were Soferim chosen to oversee the documenting, protecting, and archiving of the Sefer Torah. In present time, the practice of the Soferim continues a process similar to that of the Levites under Ezra, adhering to laws defined in the Torah and expanded upon in the Mishna.[xvi]

When transcribing text, the Sofer uses a quill made from the feathers of a kosher bird. The end of the quill is cut to allow for variations in the letterform line width. Text must be written on parchment made from the skin of a kosher animal with black ink formulated by combining copper vitriol (a stone which provides the required darkness for the ink) with a bonding substance such as Arabic gum or gall nuts.[xvii] The writing of a complete Sefer Torah takes up to a year while the preparation of the parchment in itself requires up to two months to complete. Essential for the parchment's creation is the use of the epidermis layer of the skin, the klaf. The extensive process includes cleaning and soaking the skin, setting it in a barrel of lime for several weeks, and removing hair meticulously with a knife. Once the skin has been properly cleared of hair, it is flattened with a roller and stretched on frames to dry. The skin is double checked for any remaining imperfection before using a specially angled knife to cut the klaf from the skin. The surface of the klaf is prepped for writing by polishing the parchment with pumice and chalk, then measuring margins and column width by drawing barely noticeable horizontal lines using a stylus tool.[xviii]

Following principles of design and typography, a designer today initiates a project by organizing the layout structure of a design using a grid system. A blueprint of the work is developed to determine margin and column sizing, text and image balance, negative and positive space, and typographic hierarchy. By stressing elements of importance in the layout and typography, the goal is to present information to a viewer with clarity, readability, and flow, allowing for comprehension of the message.[xix]

In producing the Torah, specific laws define the measurements of a completed scroll as well as each individual page within the scroll. "One does not make a Sefer Torah's height greater than its diameter, nor its diameter greater than its height."[xx] The grid and layout of the page is measured by etzbaot, approximately the size of a thumb, in which surface margins are defined as the bottom (four etzbaot), the upper (three etzbaot), and the left and right (five etzbaot per side). Horizontal lines spaced within the column must be the width of thirty letters and there must be no less than 48 lines or more than 60 lines. "We don't make it less than this lest the column resemble a missive, and we don't make it more than this because then one's eyes become distracted by the length of the line and is more likely that he will make a mistake."[xxi]

This concept is practiced in contemporary design, where, depending on the size of the surface and the length of the content, line width is determined by ideal readability and comprehension.[xxii] Designer and typographer Eric Spiekermann stated in his book, *Stop Stealing Sheep: and Find Out How Type Works* that "The lines should be long enough to get complete thoughts into them and there ought to be enough space between them to be able to finish reading one line before your eye gets distracted by the next."[xxiii]

The Sefer Torah is written one page at a time with each sheet being sewn together, forming the completed scroll.[xxiv] Composed of five separate books, the Torah is written in complete order; first to last page, indicating the beginning and end of each chapter through the increase in line space (leading) between text. Defined by Jewish law, columns on the page should be spaced two etzboat apart and there should be no more than eight columns and no fewer than three

columns per sheet. A Sofer writes using one column, increasing the height and width of letters to extend beyond multiple lines in order to complete the text at the end of the column. The exception to this rule is the final page of the Torah scroll, which contains a verse without many words. "The last verse does not have many words as there are lines on the sheet, so he should stretch the letters of one word vertically over four or five lines so as to finish at the end of the column."[xxv] When writing the conclusion of Torah, the text ends in the center of the last column line to clearly define its completion.

In the study of typography, one is attuned to the positive shape of a letter character in addition to the negative space surrounding the form. When placing text together, as in a word and/or sentence, the space between letterforms is adjusted to present ideas, hierarchy, and readability through the sizing, line width, and style of the text. Adjusting the space between letters in a word is called "tracking," and the space between individual characters is "kerning." Similarly, in the work of the Sofer, attention to spacing between letterforms and words is practiced for readability and sacred purpose. Letterforms must be meticulously written, making sure that each letter can be seen clearly with the klaf surface surrounding each character. "One must leave a hair's breadth between each-letter, and they must not be too far from each other lest one word appear like two."[xxvi] Using a copyist method of transcription, before writing, a Sofer compares the column width with the number of letters and words in the line to determine the size and spacing of text. Text must be written in the precise order, and the letters must fit properly within the margins. If space begins to run out on the line, the scribe makes letterforms narrower so that they may fit within margins.

If one had a five-letter word at the end of the line, he should not write two

letters within the column and three without, but three within and two without.

If there isn't space to write three letters, he should leave the place blank. One

may even write two letters of a three-letter word in the margin, since at last

some of it is inside the column. However, one may not write a two-letter word

in the margin.[xxvii]

Conclusion

Principles and concepts pertaining to design and typography date back to ancient times. By examining diverse methods of design through a reflection into early civilization Hebrew script and texts, an alternative discourse into typographic evolution and processes can be explored. The article offers an approach into the study of design by defining and comparing elements; layout and organization, character and word spacing, stylizing text for hierarchy, and consideration of those positive and negative forms in letter and surface spacing utilized in writing sacred text since biblical age. The communication between sender (author) and receiver (reader) is paramount in that, regardless of design method or style, viewer readability and comprehension is the ultimate, essential goal.

The similarities between rules of typography and the ancient laws of writing sacred texts represents the influence that the Torah and the biblical writing practices of the Soferim have had on the evolution of contemporary type design. Due to the dispersion of the Jewish population after the fall of the Second Temple, spoken and written Hebrew decreased in the

everyday context, hindering the evolution of Hebrew letterform design. Until recently, the

study of design and typography has followed a Eurocentric canon, which mainly only explored

an evolution of aesthetics within Christian European culture.

While great typographic progress has taken place in Latin language alphabets, within academia,

the study of diverse language text has remained dormant. Studying the history and theories

pertaining to Hebrew typography and text design, from the invention of the Hebrew alphabet,

its visual modification in letterform design that was subject to Jewish migration, and ancient

Scribal influences, are significant to the field, as they allow for the consideration of different

sources of design discourse. Comparatively speaking, little research into the relationship

between ancient sacred Hebrew text and contemporary Hebrew typography has been

developed. Further investigation into the subject benefits the study and practice of typography

and design within a global culture.

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