Design Arabic alphabet for communication between blind and sight

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Abstract

An Arabic alphabet based on the Braille alphabet to build a network that allows us to combine both the Arabic alphabet designed by the researcher and Braille ,The aim of this vision is to enable the reader to read the Braille language easily and thus social integration between the visionary and the blind to reach a comprehensive society where Braille becomes common among Arab society by producing an Arabic print line that combines visual and visual experience and is based on a standard Braille line and can also be visually read At this time we rarely see Braille in the Arab public space. We do not find any interest from the Arab designers in this point. This experience is one of the first Arabic experiences that make Braille a way of communication between people who are sighted and blind. For the graphic design is directed to the visual and the blind at the same time, which makes the blind important role in the Arab community and through this alphabet communication between blind people and sighted in the same place and the application of the Arabic alphabet on many social aspects such as (Metro tickets - packages in general -indoor signs).

key words: **Braille - Arabic alphabet – Arabic Typographic**

Research problem

Lack of interest of Arab designers in directing graphic design to serve the blind

Research Objective:

-Social integration communication between blind and sight.
- Arabic alphabetic design of the vision combined with Braille alphabet for the blind

Research hypotheses:

The research assumes that there is a communication process between the vision and the blind through the design of an Arabic alphabet that is compatible with the Braille alphabet so that they are mixed together and form one alphabet read by the blind and the blind at the same time.

Previous studies

- - There are no previous studies in the Arab community for this project, due to the lack of interest of Arab designers in directing graphic design to serve the disabled, but in the Latin alphabet, several attempts were made to overlap or merge the Latin letters with Braille to make Braille visual lines. Include:Visual Braille (2009, Christopher Heller, Michael Rub and Theo Seemann in 2009 at Merz Akademie Stuttgart).

- . Larysa Kurlak's work in 2014. (It is unclear whether Larysa actually designed the typefaces that she is showing.)
- Blind Type (Nuria Lopez, 2017).
- Kosuke Takahashi's Braille Neue (2017).
- Monster (2018) by Emilie Combes.
1. Hannah Green's Braille Type (2018).

ABCDEFGHIJKLM
NOPQRSTUVWXYZ

CHRISTOPHER HELLER,
MICHAEL RUSZ THEO
SEEMANN VISUAL BRAILLE
2009

(1)

(3)
Larysa Kurlak Braille

ABCDEF
MNNOPQ
XYZ
GHIJKL
RSTUVW
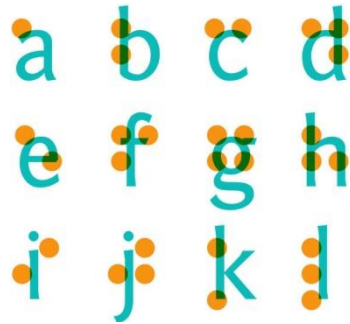
2
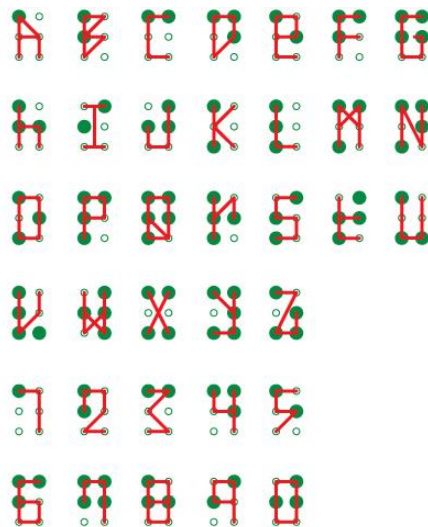(22) Nuria Lopez Blind Type 2016

ABCDEFGHIJKLM
NOPQRSTUVWXYZ
1234567890
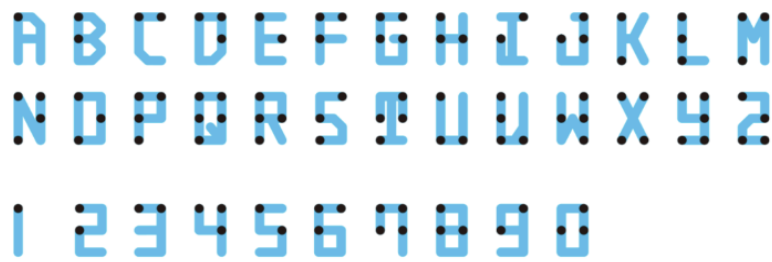
2017   4
Kosuke Takahashi Braille Neue 2017
(19)

5   **Larysa Kurlak Braille 2014**

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Phase 1: Study and analysis

Analysis is the starting point of the design process and should be completed before the design process begins.

Alphabet design:

Braille reading mechanism:

Braille readers are done by moving the hand or hands from left to right along each line. Both hands are usually involved in the reading process, and are usually read with the index fingers. The average reading speed is 125 words per minute, but a speed of up to 200 words per minute can be obtained.
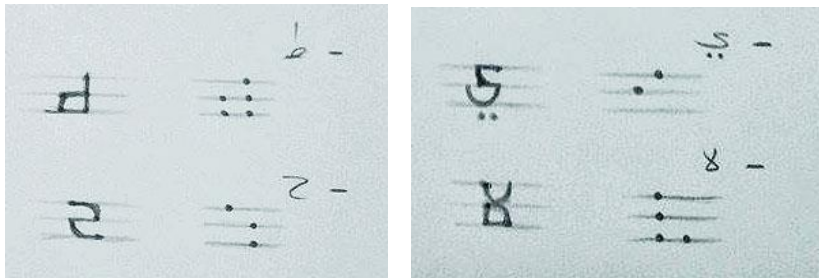
Example to illustrate the Braille Arabic alphabet:
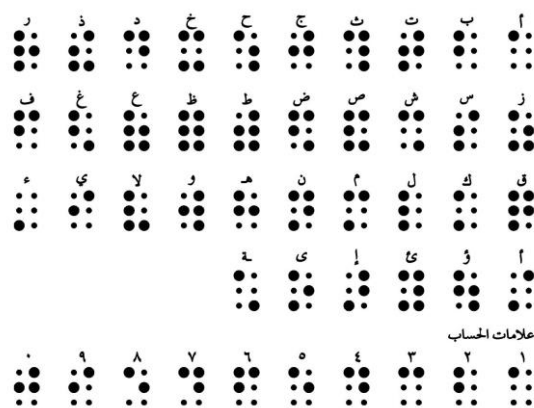
(Arabic Braille alphabet)

Phase 2: Creating the alphabet

Steps to create the alphabet: First: the design stage

2. alphabet

(Preliminary sketches to design an Arabic alphabet paired with Braille by the researcher)

Second: Drawing stage:

The characters are redrawn in one of the Victor programs such as Adobe Illustrator with a precise geometrical drawing, taking into account Braille ratios and distance between points

(The design of an Arabic alphabet paired with Braille by the researcher)

(The final shape of the design of the first alphabet Braille Arabic)

Applications on the alphabet:

(Applications on drinks and medicines for the alphabet)

(Applications on Guideposts for the alphabet)

(Applications on drinks and medicines for the alphabet)

(Applications for the alphabet on numbers)

– Benefits of the study

The combination of the Braille alphabet with the hipster alphabet designed by the researcher opens up a lot of benefits in:

 -1Directing the graphic design in creating an Arabic alphabet read by the sighted people that corresponds to the Braille alphabet which is easy to learn and read for both the blind and the blind.

 - 2Integration of the blind in society and facilitate the challenges facing it.

 - 3Simplify the language of Braille for the sight to be able to read and then assist the blind in his dealings.

 - 4Trying to reach a comprehensive society where Braille becomes common among the Arab community through the production of an Arabic typography line combining tactile and visual experience and strive to achieve Braille for all.

5 - Application of the alphabet on many products in the Arab society such as: annual calendar - packaging packages such as food and medicine - internal signs - book covers - textbooks - soft drinks - .... etc

● **Results**

 •This research experiment is the first graphic design guidance in which the Arabic alphabet is incorporated into Braille.

 •Remove the gap between the sight and blind through an alphabet used by the blind and blind.

 •Increasing attention to the blind person and integrating them into social life.

•Remove learning difficulties by the blind person of Braille.

•Facilitate the use of Braille in the Arab public space so that it is integrated with the letters of the Arabic alphabet to make it available to the blind and sighted at the same time.

- **Recommendations:**

- •**Adoption of the idea by packaging companies to try to apply the alphabet widely in nutrition and pharmaceutical products.**

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