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MATRIX PROJECTS AS AN EXPERIMENTAL METHOD IN TYPOGRAPHY COURSE

ABSTRACT

For visual communication design education, experimental typography method is an inspiring design exercise in typography lessons. Not only directing students to coincidental discoveries it also let them show new points of view in typography and font design. In particular, constructing typography in an experimental method causes primitive effects and productive results in creatively expressed ideas. Thanks to the disposition of Matrix Typography Projects, which are an experimental typographical method, design students both explore several different ideas to create a font design and find, discover new unique design approaches. In each different structural system, students will be able to find a path for a new font design. This challenging and inspirational typographic exercise, the matrix project, focuses on the letter's structural properties and teaches the main idea of the font design. This project is beneficial in teaching students an influential way to compose multiple conceptual materials for the font design and generate new ideas in typography education.

Keywords: Typography, Visual Communication Design, Matrix Project, Experimental Typography

TİPOGRAFİ DERSİNDE DENEYSEL BİR YÖNTEM OLARAK MATRİS PROJELERİ

ÖZET

Görsel iletişim tasarımı eğitimi için deneysel tipografi metodu, tipografi derslerinde ilham verici bir tasarım egzersizidir. Tipografide ve font tasarımında, öğrencileri raslantısal keşifler kadar yeni bakış açılarına doğru da yönlendirmektedir. Özellikle, yaratıcı fikirlerin ifadesinde, tipografiyi deneysel bir yöntemle inşa etmek, primitif etkilere ve verimli sonuçlara sebep olmaktadır. Deneysel tipografik bir yöntem olan, Matris Tipografi Projelerinin tabiatı sayesinde, tasarım öğrencileri hem font tasarımında birçok farklı fikir bulmakta hem de benzersiz tasarım yaklaşımlarını keşfetmektedirler. Her bir farklı yapısal sistemde, öğrenciler yeni bir font tasarımı için bir yol bulmaktadırlar. Bu zorlayıcı ve ilham verici tipografik egzersiz, harfin yapısal özelliklerine odaklanmakta ve font tasarımının ana fikrini öğretmektedir. Bu proje, öğrencilere font tasarımında çoklu kavramsal malzeme oluşturmayı öğretmede ve tipografi eğitiminde yeni fikirler üretmede konularında etkilidir.

Anahtar Kelimeler: Tipografi, Görsel İletişim Tasarımı Eğitimi, Matris Projesi, Deneysel Tipografi

1. INTRODUCTION (GİRİŞ)

Graphic design exist to communicate with people (Twemlow, 2008:8). Typography, a vital branch of graphic design and visual communication design education, is one of the strongest tools for the designer to communicate. Typography must reflect the life, concepts, feelings, trends. That's why, in order to find the appropriate way to communicate, it has to keep up with time constantly. As in many creative disciplines, type design has to reflect the philosophies, actual moods and the time being (Branczyk, Nachtwey, Nehl, Schlaich and Siebert, 2001). To catch all these moods and concept of time, the designer has to be open-minded and experimental in his/her design process.

2. RESEARCH SIGNIFICANCE (ÇALIŞMANIN ÖNEMİ)

The Matrix Project is one of the most efficient exercises for the students who are willing to find a starting point for a font design and a typographic solution for a graphic design problem. With the help of the Matrix Project, design students can focus on the basis of the typography with ease. In this article, it has been aimed to indicate and analyze the grades and results of this typography design project.

3. EXPERIMENTAL TYPOGRAPHY (DENEYSEL TİPOGRAFİ)

Experimental method in typography design has been in an undeniable duration throughout the design history. Willen and Strals (2009:15) state that "…World war I, ended Art Nouveau movement and ushered in several new strains of lettering and typographic experimentation". Mostly futurism and dadaism headed to the experimental typographic designs. Such that dadaist fliers and posters shook typography rules of their time to its foundations (Weill, 2007:41). Also according to Becer (2007:20-21) the movements and schools; futurism, dadaism, de stijl, bauhaus, suprematism, constructivism contributed today's typographic design and the pioneers of modernism opened an experimental dimension by destroying common unchanged rules. With these historical movements today's typography was shaped and experimental typography found its place in typography. The experimental way of designing typography helps the design student explore both new ideas and also his/her own design language. When we take today's typography education into consideration, the most essential point is guiding the students to make discoveries and invent new ideas. Invention is mostly possible with experimental exercises. Certainly the vital point of the typography education is not only teaching the basis but also confronting students with experimental designprojects.

4. THE MATRIX TYPOGRAPHY PROJECT (MATRİS TİPOGRAFİ PROJESİ)

while forming the Matrix Project that I gave to the students, I was inspired by three typography workshops. Each of them has a brilliant discovery hint inside. In the 12th International Istanbul Graphic Design Week, the matrix concept works were in the workshops. In the workshop of Jürgen Hefele and Simone Hüetlin, the project was based on defining a certain matrix and suitable pixels as a tool for forming the letter. The type was going to be formed on this discovered grid pattern. The project is explained as "the letters consisting of pixel parts fixed on a matrix or grid system, a sort of pattern or regular structure. The letters should be created with or within this pattern". (Mimar Sinan Fine Arts University, 2008:188). In another workshop leaded by Leonardo Sonnoli, the main aim was to show how to be inspired from the environment by the observation ability of the

designer. Also in this workshop it was seen that students discover typography on a pattern or a matrix system. The Project is explained as "In the first Project, all typography in the selected shots will be deleted and in the second Project, all imaginary contents apart from the typography will be deleted." (Mimar Sinan Fine Arts University, 2008:194). Further in an organic typography project leaded by Prof. Tevfik Fikret Uçar, the students made incidental typographic discoveries. Uçar explains the Project theme as "...even using organic forms to create animated, spontaneous letter forms." (Mimar Sinan Fine Arts University, 2008:145). By staying away from digital designing and computers, this project forced students to see and establish letter forms, making connection between forms casually exist in the environment around. Another inspiration was from the historical radical typography who gave direction to today's typography. As Gonzales Crisp (2005:256) states "...then radical typography of Zwart, Schwitters, El Lissitzky and others was realized using the technology of the time –lead, wood, ink, paper". Using simple technology has not been an obstacle in creating a good typographic design. So the natural result is to form the Matrix typography projects where students will be able to make discoveries without the help of existing old ideas and pre-made computer solutions. The students were free to use the computer after finding the idea or concept. So the Project brief was formed as: observing the environment around, searching a concept, finding a matrix system to locate the font design. In font design there are some basic points exist where the letters (characters) locate. Such as; cap line, baseline, cap-heigh, x-height. A grid system, a matrix, x&y coordinates are needed to locate and work on the structure of the letter. As we look at the history, in 1692 with the order of French King XIV. Louis, a grid system was made by scientists and mathematicians which consisted of 2304 little squares that helped design the font "Romaine du Roi/Roman of the King" (Uçar, 2008:124). With the help of these grids (see Figure 1), the anatomy of the letter was formed and designing a geometrically perfect letter structure became easy. It automatically includes cap line, baseline inside which is a help in forming the letter.
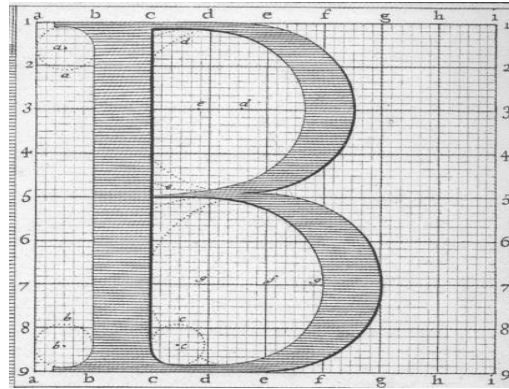

Image 1. The grid system of the font "Romaine du Roi/Roman of the King"
(Görüntü 1. "Romaine du Roi/Roman of the King" fontunun grid sitemi).

Uçar (2008:123) points out cap line as the imaginary line where the letter's highest point is, cap-height as the height of the letter and baseline as the imaginary line where letter stands. There are other detailed components in the anatomy of the letter but basic cooperatives are needed in the Matrix projects such as cap line, baseline, cap-height, x-height, which help place the main structure of

the letter. So in the Matrix Typography Project which I leaded, students first tried to find a matrix in environment, then form a letter and finally create a typographic font. They photographed many matrix systems in their daily environment, and then worked on the selected photo. The horizontal lines exist in the matrix system of the chosen photograph, substituted cap lines and baselines for the letter. The vertical lines would be used for the cap height of the imaginary font. Generally the main research questions of the Matrix Projects are; how to see a letter or a font in our environment, how to discover it, what is the fairest point to explore, finding the font in a structure, how to make multiple font discoveries.
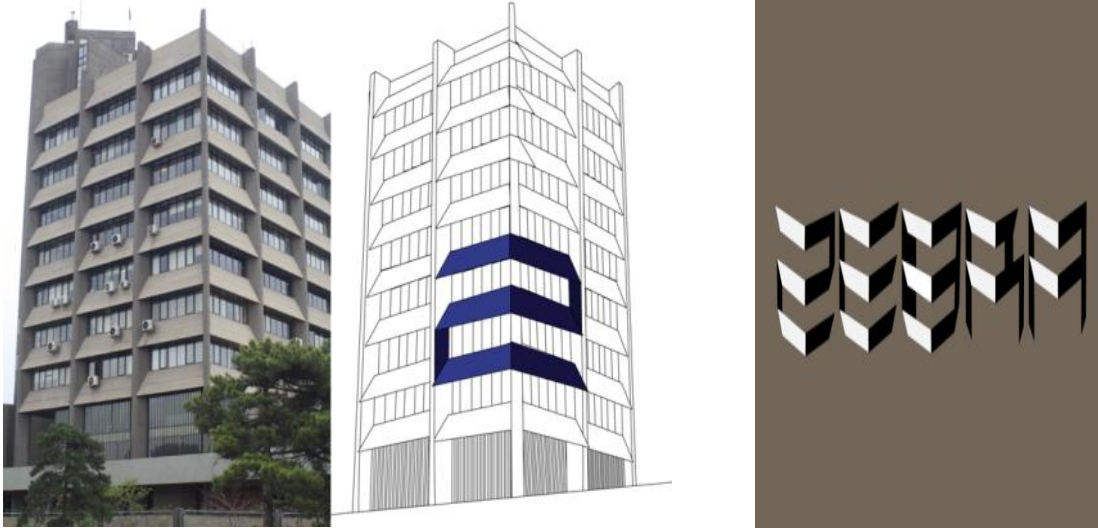

Image 2. Matrix Typography Project / Gazi University, Faculty of Fine Arts, Visual Communication Design Department Student Emre Kosker.
(Görüntü 2. Matris Tipografi Projesi/ Gazi Üniversitesi, Güzel Sanatlar Fakültesi, Görsel İletişim Tasarımı Bölümü Öğrencisi Emre Kosker)

In the first Project work (see Figure2) it can be seen that the student chose a building structure and used vertical and horizontal coordinates to locate the letter he designed by the help of the original shape of the building. Then he generated all the font design (see Figure3) by the same concept. All the letters and numbers share the same anatomy. "Each decision that affects an alphabet's visual code or the way that any letters relate to each other is part of the typographic system." (Willen and Strals, 2009:17)

Image 3. Matrix Typography Project/Gazi University, Faculty of Fine Arts, Visual Communication Design Department Student Emre Kosker
(Görüntü 3. Matris Tipografi Projesi/Gazi Üniversitesi, Güzel Sanatlar Fakültesi, Görsel İletişim Tasarımı Bölümü Öğrencisi Emre Kosker)
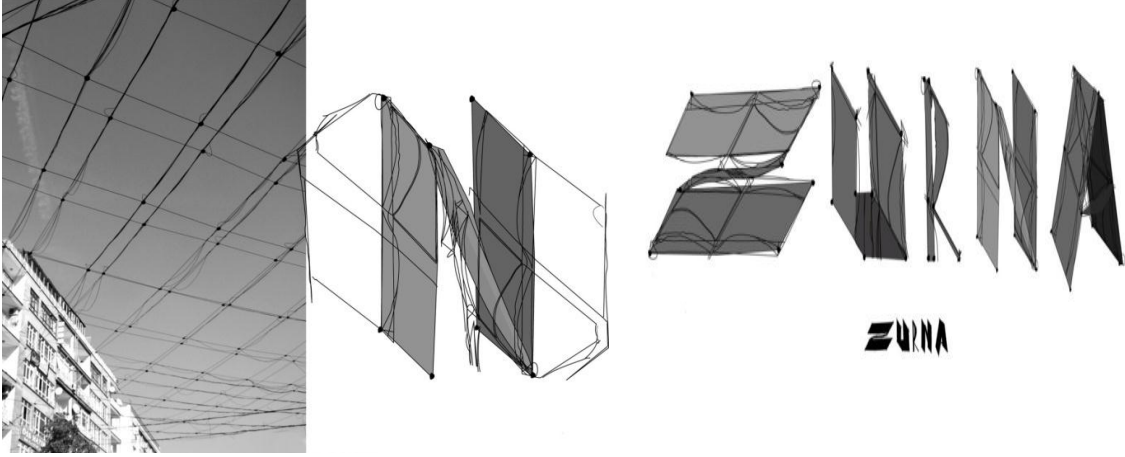
Image 4. Matrix Typography Project/Gazi University, Faculty of Fine
Arts, Visual Communication Design Department Student İrem Bilgi.
(Görüntü 4. Matris Tipografi Projesi/ Gazi Üniversitesi,
Güzel Sanatlar Fakültesi, Görsel İletişim Tasarımı
Bölümü Öğrencisi İrem Bilgi).

In the following project (see Figure 4) the student worked on a
more complicated matrix system. This project contained so much details
and alternatives for both the vertical & horizontal coordinates. It
was decided to choose the most effective coordinate to form the shape
of the font. If the student decided to choose a different coordinate
then the form of the font would change immediately. With a little
structural difference on a font the meaning and the feeling of the
design can have a massive change. The style and shape of forms
transcend the meaning of the words and communicate by themselves, as
each font has a different kind of personality (Ambrose and Harris,
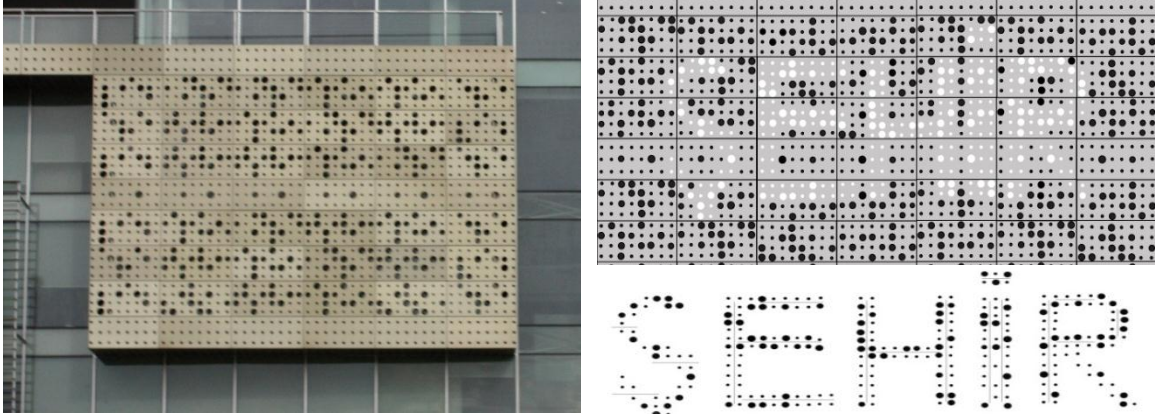2009:38).

Image 5. Font design made from Matrix Typography/Gazi University,
Faculty of Fine Arts, Visual Communication Design
Department Student Tugba Sivri.
(Görüntü 5. Matris Tipografi Projesinden font tasarımı/ Gazi
Üniversitesi, Güzel Sanatlar Fakültesi, Görsel İletişim Tasarımı
Bölümü Öğrencisi Tuğba Sivri).

According to Willen and Strals, (2009:22) all type designs begin
with a concept; the conceptual alphabets not only aim to be readable
but are also dedicated to their idea mostly. In these Projects (see
Figures 5, 9, 10) the students decided to work on a complicated matrix

system and rarely focused on the readability. The main idea was to discover what this complicated matrix would offer at the end.
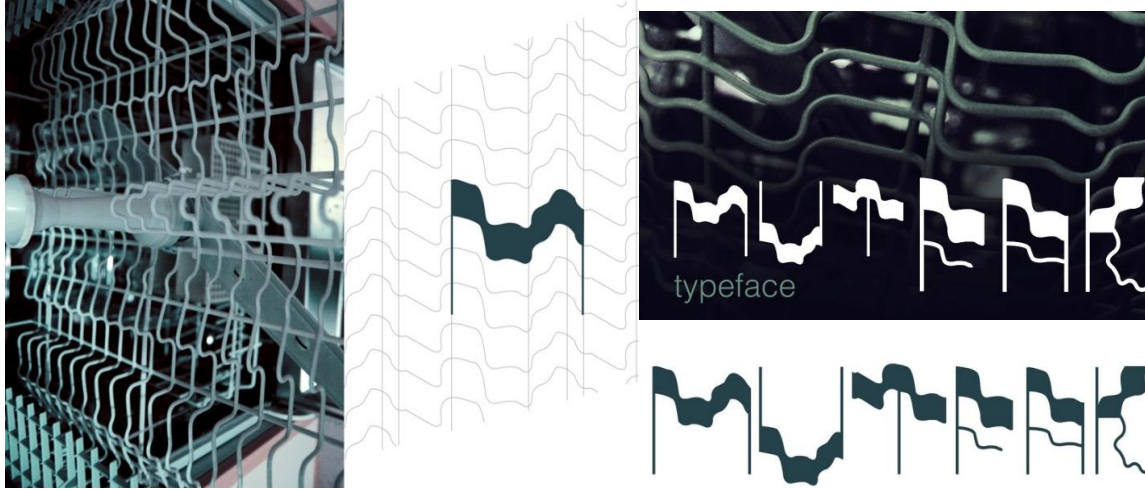

Image 6. Font design made from Matrix Typography/Gazi University, Faculty of Fine Arts, Visual Communication Design Department Student Görkem Tılıç
(Görüntü 6. Matris Tipografi Projesinden Font Tasarımı/Gazi Üniversitesi, Güzel Sanatlar Fakültesi, Görsel İletişim Tasarımı Bölümü Öğrencisi Görkem Tılıç)

"Typographic systems do not always remain static. Only the most rigid idea-driven systems of conceptual alphabets stay completely true to their origins," (Willen and Strals, 2009:19). Here the Project was about choosing the plastic unit in a dish machine (see Figure 6). The student decided to emphasize a part of the font so the top or bottom parts letters chosen to be thicker. By sticking to the original structure of the dish machine the main form of the letter occurs. However, as it can be seen there are far more alternatives for the font design from the basic lined matrix system. It depends on the student's creative idea and choice to base the matrix as vertically or horizontally. When the matrix lines rotated 180 degrees, another type form can be formed. Wherever the matrix system lands on the chosen visual, there grows multiple alternatives.
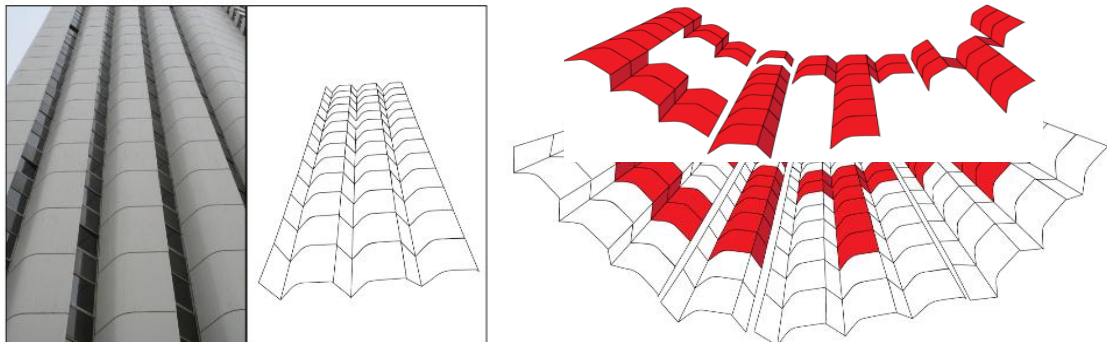

Image 7. Font Design made from Matrix Typography/Gazi University, Faculty of Fine Arts, Visual Communication Design Department Student Teoman Gonen
(Görüntü 7. Matris Tipografi Projesinden Font Tasarımı/Gazi Üniversitesi, Güzel Sanatlar Fakültesi, Görsel İletişim Tasarımı Bölümü Öğrencisi Teoman Gönen)

The system appears through the perception of the designer. These two projects (see Figures 7, 8) mostly focused on the three-dimension in the matrix system. As a result, the fonts have significant three-dimensioned forms. "Three-dimensional typography permits the letterform or word to become an object as well as a form of communication" (Elam, 1990:79).
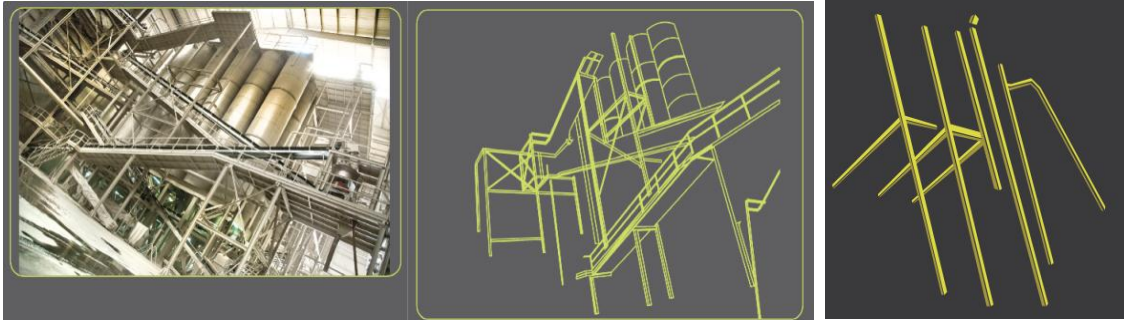

Image 8. Font design made from Matrix Typography/Gazi University, Faculty of Fine Arts, Visual Communication Design Department Student Basak Basaran
(Görüntü 8. Matris Tipografi Projesinden Font Tasarımı/Gazi Üniversitesi, Güzel Sanatlar Fakültesi, Görsel İletişim Tasarımı Bölümü Öğrencisi Başak Başaran)
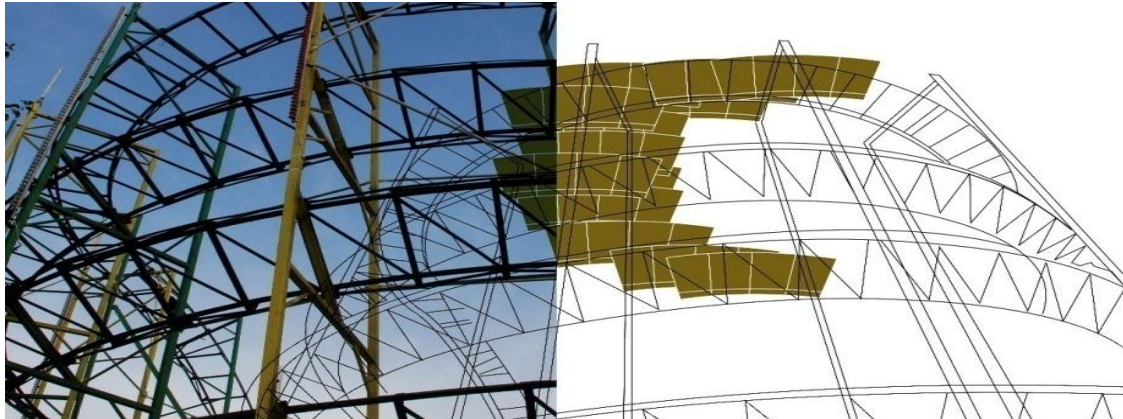

Image 9. Font design made from Matrix Typography/Gazi University, Faculty of Fine Arts, Visual Communication Design Department Student Esra Oguz.
(Görüntü 9. Matris Tipografi Projesinden Font Tasarımı/Gazi Üniversitesi, Güzel Sanatlar Fakültesi, Görsel İletişim Tasarımı Bölümü Öğrencisi Esra Oğuz)

A trace of a wheel on the sand was randomly chosen for this Project (see Figure 10). With the least hint given as a matrix the student bravely worked on this photo and formed a type font. The feeling of the trace can be seen easily on the letters.

Image 10. Font design made from Matrix Typography/Gazi University,
Faculty of Fine Arts, Visual Communication Design
Department Student Damla Duzel
(Görüntü 10. Matris Tipografi Projesinden Font Tasarımı/Gazi
Üniversitesi, Güzel Sanatlar Fakültesi, Görsel İletişim Tasarımı
Bölümü Öğrencisi Damla Düzel)

5. CONCLUSION (SONUÇ)

With the help of this typography project students can be more aware of the design material existing around them. Even a trace of a wheel, a building, a dish machine unit, a construction, and wires in the city can be enough to design a new font family. In this project both incidental fictions and accidental solutions were seen. Designing a font by an ordinary element, students gained courage to achieve their ideas in typography. Typography is a strong and an independent design element itself. A well designed font makes it easier to reach to the conditions that guide the designer to an effective design. "Typographic elements convey messages and create a much stronger bombardment to audiences by creative arrangement and combination of languages with different graphic ornaments" ("Type Addict-ed", 2007). When typography education is supported with experimental exercises, the formulas and the courage gained at the end of the projects, students' creativity is triggered intensively. According to Demir (2005:154) art educators can guide and encourage the students to innovative ways of thinking, their extraordinary ideas to raise their creativity. Leading The Matrix projects for more than 3 years in the typography lesson, it is observed that the Project yield results in student's creativity rapidly with it's affluent creative and coincidental nature.

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